

TRANSPARENCY AND FEDERAL MANAGEMENT IT SYSTEMS

HEARING

BEFORE THE
SUBCOMMITTEE ON TECHNOLOGY, INFORMATION
POLICY, INTERGOVERNMENTAL RELATIONS AND
PROCUREMENT REFORM

OF THE
COMMITTEE ON OVERSIGHT
AND GOVERNMENT REFORM
HOUSE OF REPRESENTATIVES

ONE HUNDRED TWELFTH CONGRESS

FIRST SESSION

JULY 14, 2011

Serial No. 112-83

Printed for the use of the Committee on Oversight and Government Reform



Available via the World Wide Web: <http://www.fdsys.gov>
<http://www.house.gov/reform>

U.S. GOVERNMENT PRINTING OFFICE

71-984 PDF

WASHINGTON : 2012

For sale by the Superintendent of Documents, U.S. Government Printing Office
Internet: bookstore.gpo.gov Phone: toll free (866) 512-1800; DC area (202) 512-1800
Fax: (202) 512-2104 Mail: Stop IDCC, Washington, DC 20402-0001

COMMITTEE ON OVERSIGHT AND GOVERNMENT REFORM

DARRELL E. ISSA, California, *Chairman*

DAN BURTON, Indiana	ELIJAH E. CUMMINGS, Maryland, <i>Ranking</i>
JOHN L. MICA, Florida	<i>Minority Member</i>
TODD RUSSELL PLATTS, Pennsylvania	EDOLPHUS TOWNS, New York
MICHAEL R. TURNER, Ohio	CAROLYN B. MALONEY, New York
PATRICK T. McHENRY, North Carolina	ELEANOR HOLMES NORTON, District of
JIM JORDAN, Ohio	Columbia
JASON CHAFFETZ, Utah	DENNIS J. KUCINICH, Ohio
CONNIE MACK, Florida	JOHN F. TIERNEY, Massachusetts
TIM WALBERG, Michigan	WM. LACY CLAY, Missouri
JAMES LANKFORD, Oklahoma	STEPHEN F. LYNCH, Massachusetts
JUSTIN AMASH, Michigan	JIM COOPER, Tennessee
ANN MARIE BUERKLE, New York	GERALD E. CONNOLLY, Virginia
PAUL A. GOSAR, Arizona	MIKE QUIGLEY, Illinois
RAÚL R. LABRADOR, Idaho	DANNY K. DAVIS, Illinois
PATRICK MEEHAN, Pennsylvania	BRUCE L. BRALEY, Iowa
SCOTT DESJARLAIS, Tennessee	PETER WELCH, Vermont
JOE WALSH, Illinois	JOHN A. YARMUTH, Kentucky
TREY GOWDY, South Carolina	CHRISTOPHER S. MURPHY, Connecticut
DENNIS A. ROSS, Florida	JACKIE SPEIER, California
FRANK C. GUINTA, New Hampshire	
BLAKE FARENTHOLD, Texas	
MIKE KELLY, Pennsylvania	

LAWRENCE J. BRADY, *Staff Director*

JOHN D. CUADERES, *Deputy Staff Director*

ROBERT BORDEN, *General Counsel*

LINDA A. GOOD, *Chief Clerk*

DAVID RAPALLO, *Minority Staff Director*

SUBCOMMITTEE ON TECHNOLOGY, INFORMATION POLICY, INTERGOVERNMENTAL
RELATIONS AND PROCUREMENT REFORM

JAMES LANKFORD, Oklahoma, *Chairman*

MIKE KELLY, Pennsylvania, <i>Vice Chairman</i>	GERALD E. CONNOLLY, Virginia, <i>Ranking</i>
JASON CHAFFETZ, Utah	<i>Minority Member</i>
TIM WALBERG, Michigan	CHRISTOPHER S. MURPHY, Connecticut
RAÚL R. LABRADOR, Idaho	STEPHEN F. LYNCH, Massachusetts
PATRICK MEEHAN, Pennsylvania	JACKIE SPEIER, California
BLAKE FARENTHOLD, Texas	

CONTENTS

Hearing held on July 14, 2011	Page 1
Statement of:	
Kundra, Vivek, Federal Chief Information Officer, Office of Management and Budget; Roger Baker, Assistant Secretary for Information and Technology, U.S. Department of Veterans Affairs; Lawrence Gross, Deputy Chief Information Officer, U.S. Department of the Interior; Owen Barwell, Acting Chief Financial Officer, U.S. Department of En- ergy; and Joel Willemssen, Managing Director of Information Tech- nology Issues, Government Accountability Office	7
Baker, Roger	17
Barwell, Owen	27
Gross, Lawrence	22
Kundra, Vivek	7
Willemssen, Joel	36
Letters, statements, etc., submitted for the record by:	
Baker, Roger, Assistant Secretary for Information and Technology, U.S. Department of Veterans Affairs, prepared statement of	19
Barwell, Owen, Acting Chief Financial Officer, U.S. Department of En- ergy, prepared statement of	29
Connolly, Hon. Gerald E., a Representative in Congress from the State of Virginia, prepared statement of	5
Gross, Lawrence, Deputy Chief Information Officer, U.S. Department of the Interior, prepared statement of	23
Kundra, Vivek, Federal Chief Information Officer, Office of Management and Budget, prepared statement of	9
Lankford, Hon. James, a Representative in Congress from the State of Oklahoma, prepared statement of	2
Willemssen, Joel, Managing Director of Information Technology Issues, Government Accountability Office, prepared statement of	38

TRANSPARENCY AND FEDERAL MANAGEMENT IT SYSTEMS

THURSDAY, JULY 14, 2011

HOUSE OF REPRESENTATIVES,
SUBCOMMITTEE ON TECHNOLOGY, INFORMATION POLICY,
INTERGOVERNMENTAL RELATIONS AND PROCUREMENT
REFORM,
COMMITTEE ON OVERSIGHT AND GOVERNMENT REFORM,
Washington, DC.

The subcommittee met, pursuant to notice, at 1:48 p.m. in room 2157, Rayburn House Office Building, Hon. James Lankford (chairman of the subcommittee) presiding.

Present: Representatives Lankford, Farenthold and Connolly.

Also present: Representative Issa.

Staff present: Will L. Boyington, staff assistant; Hudson T. Hollister, counsel; Tegan Millspaw, research analyst; Peter Warren, legislative policy director; Christine Martin, staff assistant; Jaron Bourke, minority director of administration; Amy Miller, minority professional staff member; and Cecelia Thomas, minority counsel/deputy clerk.

Mr. LANKFORD. Committee will come to order.

This is a hearing on Transparency and Federal Management of IT Systems of the Oversight and Government Reform Committee.

We exist to secure two fundamental principles. First, Americans have a right to know that the money Washington takes from them is well spent. And second, Americans deserve an efficient and effective government that works for them. Our duty on the Oversight and Government Reform Committee is to protect these rights and it is our solemn responsibility to hold government accountable to taxpayers because taxpayers do have a right to know what they get from their government.

We have worked and will work tirelessly in partnership with citizen watchdogs to deliver the facts to the American people and bring genuine reform to Federal bureaucracy. This is the mission of the Oversight and Government Reform Committee.

I am going to submit my opening statement for the record.

[The prepared statement of Hon. James Lankford follows:]

Suggested talking points
Opening statement
Subcommittee on Technology, Information Policy, Intergovernmental Relations and
Procurement Reform

“Transparency and Financial Management IT Systems”

July 14, 2011, 1:30 pm

- This is the third hearing at the Committee on Oversight and Government Reform, and the second of this Subcommittee, that will consider the vital question of how our government can be fully transparent and accountable to its people.
- Americans deserve to know what their government is spending – on contracts, on grants, and on internal purposes like staff salaries. This information should be easily accessible online, and it should be categorized – by agency, by program, by appropriation, by Treasury account.
- Americans deserve to know. At the same time, Federal decision-makers need to know. We have entered a difficult fiscal period. Agency officials and Congressional appropriators need better information than ever before about which programs work and which don't.
- We know from previous hearings that the Federal government does not provide citizens and decision makers with accurate information about its spending. For example, according to the Sunlight Foundation, USASpending.gov is only accurate for 35% of Federal grant programs.
- The responsibility for providing accurate data to citizens and decision-makers falls on the IT systems that track Federal agencies' accounting, spending, grants, and contracts. The U.S. government is spending \$80 billion on information technology in the current fiscal year.
- Our Committee needs to better understand how these systems work, how they communicate with one another, and how they report critical data to the government-wide databases that provide public transparency. On March 8, Chairman Issa, Jordan, Platts, and I sent a letter to every Federal department, asking them to describe their management systems and explain how they interact.
- We appreciate the departments' detailed responses to our request. The responses illuminate the huge number of separate systems, the frequent use of manual processes for the exchange of information, and the departments' plans for modernization.
- I am especially pleased to welcome Vivek Kundra, who is serving his final month as the first-ever Chief Information Officer for the whole Federal government. He will be an

invaluable source of wisdom on the Federal government's approach to information technology.

- I also appreciate the time being taken by these senior officials of the Departments of Veterans Affairs, Interior, and Energy, who will share their own lessons learned from managing information technology investments and pursuing better data quality.
- And we are always grateful to have input from the Government Accountability Office, particularly on short notice. Welcome to Joel Willemsen.
- The issues we will consider today are not headline-grabbers, but they are central to democracy. Our government derives its just powers from the consent of the governed. Americans must understand what their government is doing to be capable of giving their consent. In that sense, there is a direct connection between the Declaration of Independence and Vivek Kundra's IT Dashboard. Thanks to everyone for being here.

Mr. LANKFORD. As the ranking member has also chosen to do, is that correct?

Mr. CONNOLLY. That is correct, Mr. Chairman.

[The prepared statement of Hon. Gerald E. Connolly follows:]

Statement of Congressman Gerald E. Connolly
Technology and Procurement Subcommittee
July 14th, 2011

I'm delighted that 7 months into this session this Subcommittee is finally holding a hearing that is arguably about technology. We are fortunate to have Vivek Kundra as a witness. Along with Chief Technology Office Aneesh Chopra, Mr. Kundra has been the foremost promoter of technological innovation at the White House, with direct benefits for American taxpayers and Northern Virginia in particular.

Unfortunately, Mr. Kundra is leaving the position of Chief Information Officer. Since he played a central role in the visionary 25 Point Plan to Reform Federal IT Management, I look forward to hearing his thoughts about how to institutionalize those objectives, particularly with respect to cloud computing, so that agencies continue to move forward even when he is not there to oversee the shift to the cloud.

The first objective identified in the 25 Point Plan is consolidation of 800 federal data centers by 2015, representing approximately 40% of the total. I have introduced legislation entitled the Federal Cost Reduction Act, which would make statutory the 25 Point Plan's cloud computing target and then double it by 2020, reducing federal data centers by 80% and saving billions of dollars in taxpayer money. With \$24 billion in annual federal energy bills, it is imperative that we reduce electricity consumption associated with federal data centers. Many of these federal data centers are only being used at 15-20% of capacity, which is why Mr. Kundra's goal of consolidating 40% of them by 2015 is achievable. This consolidation target can be met through consolidation of federal data centers, a shift to private or public cloud services, or a combination of these strategies. I believe we need statutory as well as executive cloud computing targets and hope that this subcommittee will mark up the Federal Cost Reduction Act.

We will also receive agency responses to inquiries submitted, without consent by minority members of the committee, to federal agencies about their data tracking systems. I would appreciate the opportunity to learn about why we are having this hearing on federal data systems after the full committee has already reported legislation—the DATA Act—which seems predicated on the answers the majority thought it would receive from agencies. While I am not sure whether the agencies' answers are what the majority expected, it is clear that the DATA Act could impose expensive new reporting requirements on localities, states, universities and contractors. Imposition of new reporting requirements presumably would require additional federal personnel as well.

At the DATA Act markup, Ranking Member Cummings expressed some concerns about implementation of that bill, including complete repeal of the Federal Funding Accountability and Transparency Act, the unprecedented authorities granted to the new Board, the financial burden on state and local governments, and other issues. I appreciate that the Chairman agreed to work with the Ranking Member and believe it is imperative that we address the issues that Mr. Cummings raised prior to the DATA Act going to the floor.

The DATA Act authorizes \$51 million per year in new spending on the federal bureaucracy to track spending. I look forward from learning from the witnesses today whether that would seem to be sufficient to carry out the requirements of the DATA Act, and to get a sense of the staffing requirements the DATA Act would impose on their respective agencies.

Thank you again for holding a hearing on technology.

Mr. CONNOLLY. I just want to join you in welcoming our panel and also particularly, Mr. Vivek Kundra who is, unfortunately, going to be leaving Federal service. I have known Vivek for a long time and he has provided very visionary leadership in the Federal Government. I certainly hope his good work will not be discarded but in fact attended to because I think he set us on the right path in terms of U.S. technology policy.

Thank you. And with that I'll also submit my full statement for the record.

Mr. ISSA. Mr. Chairman, could I have just a moment?

Mr. LANKFORD. You most certainly may. I recognize the chairman of the full committee.

Mr. ISSA. I only came up to make a quorum but if this is the last time we get you on the cheap because somebody is going to scrape you out and pay you what you are worth, then we will miss you. Hopefully, you will still come back in some new role because you have been a great bipartisan friend to the committee.

Mr. KUNDRA. Thank you for your kind words.

Mr. ISSA. You deserve that and more.

I will come back later on but thank you, Mr. Chairman.

Mr. LANKFORD. Thank you.

With that, all Members may have 7 days to submit opening statements and extraneous material for the record.

I would like to now welcome our panel of witnesses. We have already spoken several times already about Mr. Vivek Kundra. He is the Chief Information Officer at the Office of Management and Budget, and the first time the Federal Government has had that, so you get to be the pacesetter. As I mentioned to you earlier, that is always the person who does the greatest amount of work. Everyone else builds on your work from here on out.

Mr. Roger Baker, Chief Information Officer of the Department of Veterans Affairs. Thank you for being here. Mr. Lawrence Gross is Deputy Chief Information Officer of the Department of the Interior. Mr. Owen Barwell, Acting Chief Financial Officer of the Department of Energy. Mr. Joel Willemsen is Managing Director of Information Technology Issues at the Government Accountability Office [GAO].

Pursuant to committee rules, all witnesses will be sworn in before they testify. If you would please rise and raise your right hands. Thank you gentlemen.

[Witnesses sworn.]

Mr. LANKFORD. Let the record reflect that all witnesses answered in the affirmative. You may be seated.

In order to allow time for discussion, I will ask you to limit your testimony to 5 minutes. There is a countdown clock in front of you with which I am sure all of you are familiar with. It will count down from five to zero. If you go a little bit over, we will be fine with that.

As I mentioned to everyone before, we do have votes that will be called sometime in the middle of this afternoon and we are going to honor your time as much as we possibly can and to be able to get straight to questions as quickly as we can and hopefully get a chance to get this hearing finished.

With that, I would like to recognize Mr. Kundra for 5 minutes.

STATEMENTS OF VIVEK KUNDRA, FEDERAL CHIEF INFORMATION OFFICER, OFFICE OF MANAGEMENT AND BUDGET; ROGER BAKER, ASSISTANT SECRETARY FOR INFORMATION AND TECHNOLOGY, U.S. DEPARTMENT OF VETERANS AFFAIRS; LAWRENCE GROSS, DEPUTY CHIEF INFORMATION OFFICER, U.S. DEPARTMENT OF THE INTERIOR; OWEN BARWELL, ACTING CHIEF FINANCIAL OFFICER, U.S. DEPARTMENT OF ENERGY; AND JOEL WILLEMSEN, MANAGING DIRECTOR OF INFORMATION TECHNOLOGY ISSUES, GOVERNMENT ACCOUNTABILITY OFFICE

STATEMENT OF VIVEK KUNDRA

Mr. KUNDRA. Good afternoon, Chairman Lankford, Ranking Member Connolly and members of the subcommittee.

Thank you for the opportunity to testify on the administration's ongoing efforts to move the government to a more open, transparent and participatory entity.

Over the last 2½ years, our efforts to shine light on government operations have taught us 10 key principles that we must apply as we scale transparency across all Federal spending. I would like to talk about these key lessons that we've learned.

Number one, that we must build end-to-end digital systems to reduce errors and protect the integrity of the data across the Federal enterprise.

Number two, build once, use often. Across the Federal Government, there are over 12,000 major IT systems with thousands and thousands of data bases behind those systems. That leads to the complexity of the enterprise which is the U.S. Government and some of the issues around data quality.

Number three, tap into the golden sources of data. What I mean by that is that we shouldn't be relying on derivative data bases, data derived from other data sources and massaged, but we should go directly to the very transactional systems that are used to do business on a day to day basis.

Number four, release data in machine readable formats and encourage third party applications. Washington doesn't have a monopoly on the best ideas and we have seen what happens when you democratize data. You have the ability to get innovation in ways that were structurally impossible before.

Number five, employ common data standards. Think about what would have happened if railroads across the country had different standards in terms of railroad track gauges. We wouldn't have had the impact we had during the industrial revolution and the trans-continental railroad that created so many jobs and opportunities and created innovation across the board. In the same way, data and having common data standards is vital as we think about transparency.

Number six, use simple, upfront data validations. If you go back in time and think of recovery.gov in the early days, there were phantom congressional districts because data wasn't validated upfront. A simple data validation upfront would have prevented phantom congressional districts from being entered to begin with.

Number seven, release data as close to real time as possible. If you think about some of the innovations and applications in the

ecosystem that have been developed such as mobile apps that allow you to see, on a real-time basis landing of flights across the country, allowing the American people to make decisions based on that data, it is because that data is real time. In the same way, when it comes to transparency, we should be able to get data on a real-time basis as someone is charging or conducting a transaction on a credit card all the way to procurement.

Number eight, engineer systems to reduce burden. It is critical to make sure that as we think about transparencies, we look at this \$3.7 trillion model in terms of how do we shine light on all of that funding, that we make sure we are not creating more burdens. A simple example, when it comes to student aid applications, is that the IRS and Department of Education decided to share data, therefore we were able to eliminate about 70 questions that students had to fill because that data was already prepopulated.

Number nine, protect privacy and security. This is critical especially in the age of Facebook and Twitter which is that you can create a mosaic effect without really thinking about it. It is one thing to release data, for example, when it comes to health care at a State level; it is another thing to release it at a zip code level. In rural parts of the country, there may be one person who has that condition and you could tie that to a Facebook account. So we have to be vigilant when it comes to protecting the privacy of the American people and also national security.

Number 10, provide equal access to data and incorporate user feedback on an ongoing basis.

These 10 principles are grounded in the work we have done and the hard lessons we have learned. I would like to share three examples of what is possible by making government more open, transparent and participatory.

Number one, when we looked at the \$80 billion we spent on information technology, we launched an IT Dashboard and parked online the picture of every CIR right next to the IT project they were responsible for. The results were we were able to reduce the budget of poorly performing IT projects by \$3 billion.

Number two, by launching Recovery.gov, what we've seen is an unprecedented low level of fraud, waste and abuse below 0.6 percent.

Number three, by launching Data.gov, we started with 47 datasets in May 2009. Today, we have over 390,000 datasets on every aspect of government operations and 29 States have followed this model, 11 cities, and 21 countries. But what we have seen is applications being developed that somebody in Washington couldn't have even imagined.

This committee has long recognized the importance of an open, transparent government and I appreciate its ongoing support for these efforts. Going forward, it will take all of us, Congress, the executive branch agencies, and recipients of Federal funds working together, to deliver on an open government that works for all Americans.

Thank you very much for the opportunity to testify. I look forward to any questions you may have.

[The prepared statement of Mr. Kundra follows:]

EXECUTIVE OFFICE OF THE PRESIDENT
OFFICE OF MANAGEMENT AND BUDGET
WASHINGTON, D.C. 20503

**STATEMENT OF VIVEK KUNDRA
FEDERAL CHIEF INFORMATION OFFICER,
ADMINISTRATOR FOR E-GOVERNMENT AND INFORMATION TECHNOLOGY
OFFICE OF MANAGEMENT AND BUDGET**

**BEFORE THE HOUSE COMMITTEE ON OVERSIGHT AND GOVERNMENTAL REFORM
SUBCOMMITTEE ON TECHNOLOGY, INFORMATION POLICY, INTERGOVERNMENTAL
RELATIONS AND PROCUREMENT REFORM**

**“Transparency and Federal Management IT Systems”
July 14, 2011**

Good afternoon, Chairman Lankford, Ranking Member Connolly, and members of the Subcommittee. Thank you for the opportunity to testify on ongoing efforts to improve transparency through information technology.

Since day one, the Administration has been committed to open government and increased transparency. As President Obama stated in his Inaugural Address, we must “spend wisely, reform bad habits, and do our business in the light of day, because only then can we restore the vital trust between a people and their government.” Transparency strengthens our democracy and promotes efficiency and effectiveness in Government.

Open Government platforms have helped the Federal government crack down on wasteful technology spending, attack fraud and abuse, and spur innovation by democratizing data.

As we scale these practices we undoubtedly will face obstacles on many fronts. Yet, our efforts to date have revealed key principles that will guide us as we move forward.

Cracking Down on Wasteful Technology Spending

We launched the IT Dashboard and transformed the way we look at Federal IT investments. Information on the performance of IT projects – such as budgets and schedules – that was once stored within agency walls on reams of paper and seldom updated is now publicly available online and refreshed every month.

Using the Dashboard, anyone from agency officials to the American people can now identify and monitor the performance of IT projects, on their laptops and mobile phones, just as easily as they can monitor the stock market or baseball scores. If a project is behind schedule or over budget, the Dashboard tells you that.

The Dashboard ends the days of faceless accountability. It provides the name of the agency official responsible for the project, shows you their picture and lets you contact them directly to provide feedback on the project's performance.

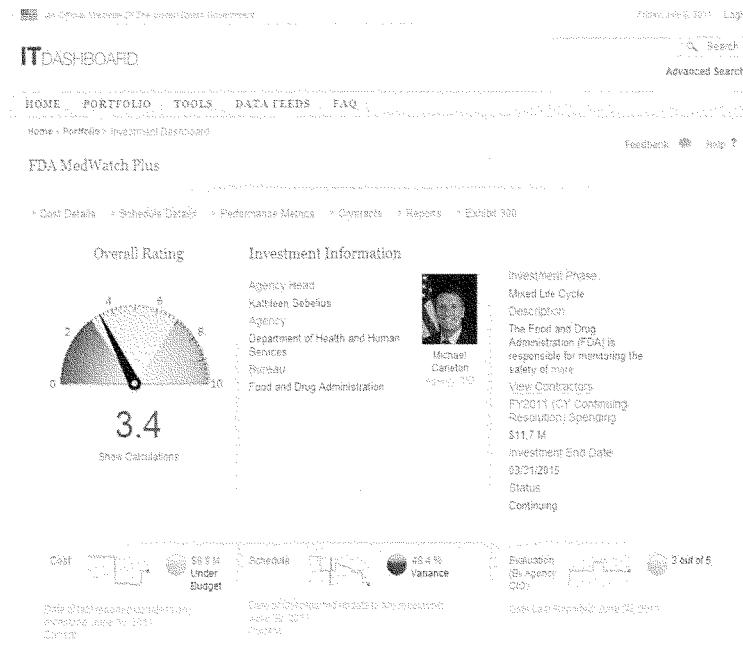


Figure 1

The release of this information was a massive change in the way we had traditionally managed Federal IT. Vendors, project managers, and agency Chief Information Officers are now executing their projects in the light of day.

For the Dashboard to drive transparency effectively, it had to be easy to use. We sought to build a consumer-class product that opened up the operations of the Federal Government to the world — not a compliance-oriented tool that would be seldom used outside the halls of government. So we focused relentlessly on the customer from the outset. During the 60 days we took to build it, we reviewed early versions of the IT Dashboard with members of Congress, GAO, industry, and various good government groups. Their feedback was instrumental in shaping the end-product.

We also wanted to make the Dashboard as easy as possible for agencies to update. To help them learn to use the IT Dashboard and see in advance how their data would be reflected, we held a series of open houses with agency CIOs, capital planning leads, project managers, and other IT

staff. These sessions not only enabled them to become familiar with the IT Dashboard prior to launch, but also allowed us to hear directly from them how we could improve the IT Dashboard and reduce their burden in reporting on the status of IT projects.

We didn't wait until the data was perfect to launch. In fact, had we waited for perfect data, the IT Dashboard would still be awaiting launch today. Only by exposing the data and holding agencies accountable will the data quality improve. GAO is a part of the effort, holding regular audits of IT projects reported to the Dashboard, to make sure the data is timely and accurate. And several members of Congress have sent letters to agency heads to underscore the importance of the data quality effort.

In addition to capturing accurate data, we must capture meaningful data. The information sources for much of the Dashboard¹ had become stand-alone processes to request and justify funding rather than serving as management tools for monitoring program health. Just last week, we took an important step in increasing transparency by redesigning the exhibits to be used in budget processes. This effort will increase the relevance of IT investment data, better align budget with management processes, improve data quality, and reduce the reporting burden on agencies.

Going forward, we will continue to improve the Dashboard to provide even better insight into the performance of Federal IT investments. We continue to solicit and incorporate feedback from Federal agencies, Congress, and the American people.

But simply shining a light and hoping results follow is not enough. We must also take action. That is why in January 2010, we held the first TechStat Accountability Session. A TechStat session is a face-to-face, evidence-based review of an IT program to turnaround, halt or terminate underperforming projects. TechStat sessions yield results. To date, they have led to over \$3 billion in life-cycle cost reductions, and have reduced average time to delivery from over two years to eight months.

We have scaled this capability across the Federal government, increasing the number of programs that can be reviewed and hastening the speed at which interventions occur. So far this year, we have trained 129 agency representatives to implement the TechStat model at their respective agencies and major agencies now conduct their own TechStat sessions.

We have open-sourced the IT Dashboard code and the TechStat process, making them freely available for any organization to use of these tools. Already, 38 states and territories have expressed interest in using the platform for state government use, taking advantage of a proven system instead of building their own from scratch.

¹ OMB Circular A-11. Exhibits 53 and 300.

Attacking Waste, Fraud and Abuse

From day one, the President identified transparency and accountability as essential to having government programs function effectively and efficiently in serving the American people. And the Recovery Act was implemented with these priorities top of mind. Throughout the life of the Recovery Act, the Administration has worked with Congress, the Recovery Accountability and Transparency Board, recipients and other stakeholders to ensure that the funds were spent with a minimal amount of waste, fraud, or abuse. Given the speed at which the funds were allocated, we knew there would be considerable challenges. Despite that, the Recovery Act has had an unprecedented low level of fraud, with less than 0.6% of all awards experiencing any waste, fraud, or abuse.

The approach we took was to allow unprecedented visibility into how these funds were being spent. Recovery.gov to provide taxpayers with user-friendly tools to track Recovery funds – how and where they are spent – in the form of charts, graphs, and maps that provide national overviews down to specific zip codes. In doing so, we provided a powerful tool for an army of citizen inspectors general to help us root out waste, fraud and abuse. Because transparency was a fundamental component from the beginning, it deterred much fraud before it ever occurred.

There were many challenges along the way, as we developed a new system for those receiving the funds to report how they were being used. Early on, we adopted uniform identifiers and data standards wherever feasible to ease the flow of data and reduce system complexity. Still we had instances where data entry difficulties led us to lessons learned to prevent such problems in the future. For example, early analysis of Recovery.gov showed that recipients were reporting money flowing to Congressional Districts that did not exist. To prevent this from happening again, the reporting system was modified to check for errors at the point of entry and collection. This prevented these bad data from entering the system in the first place.

The Administration also has improved the type of data available on USASpending.gov. Beginning in October 2010, taxpayers have been able not only to track obligations by Federal agencies but also can track obligations made by those recipients to other entities (for example, tracking payments from a prime contractor to a sub-contractor). As of May 2011, USASpending.gov displays – for awards made beginning in 2000 – over \$25.4 trillion in prime awards, based on over 47,000 individual prime awards, and more than \$3.9 trillion total in sub-awards.

Building on the lessons learned from the implementation of the Recovery Act, the President signed an Executive Order on June 13th establishing the Government Accountability and Transparency (GAT) Board. The GAT Board will provide strategic direction for enhancing the transparency of Federal spending and advance efforts to detect and remediate waste, fraud and abuse in government programs.



Figure 2

Spurring Innovation by Democratizing Data

The idea behind Data.gov was simple: to release as much government data in its raw, machine-readable format to the web, without compromising national security or individual privacy, and to spur public development of new data-driven, innovative business ideas.

On May 21, 2009 after six weeks of development, Data.gov launched, enabling the public to easily find, access, understand, and use data generated by the Federal government. Rather than creating a huge, complex system, which would have taken years, we took the approach of a lean start-up and launched a minimum viable product with just 47 datasets. Today, there are more than 390,000 datasets available.

Beyond that, Data.gov has democratized data and tapped the ingenuity of the public, inspiring scores of citizen-created applications that turn raw data into services to help the American people. Just as the Defense Department's release of GPS data created a new industry, Data.gov has unleashed an "app economy" with over 300 high-value tools and apps developed to date. Innovators from across the country have been busy putting these datasets to work because the

data is accessible, useable, machine-readable, from authoritative sources, in an open platform, and incorporates user feedback. Citizen-created apps now help parents keep their children safe, assisting travelers find the fastest route to their destinations, and informing home buyers about the safety of their new neighborhood.

Data.gov is at the vanguard of a global movement. 29 U.S. states, 11 U.S. cities, one tribe, and 19 countries have followed in Data.gov's footsteps in implementing open data platforms.

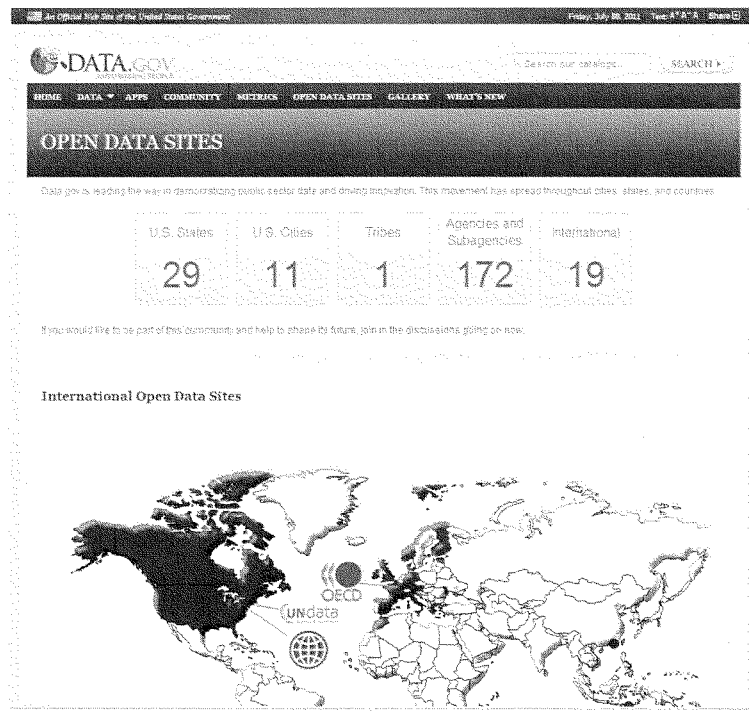


Figure 3

Scaling Transparency

Moving forward, we must expand our efforts to shine light on the entire \$3.7 trillion in the Federal Budget², including entitlements, insurance, loans, operational costs, payroll, and tax expenditures.

Tackling this challenge will force us to confront obstacles on many fronts. For example, on the technical front, there are currently more than 12,000 systems, composed of hundreds of thousands of subsystems and countless databases.

The way we fund IT, agency-by-agency, bureau-by-bureau, creates additional obstacles, leads to duplication, and hinders our ability to share services government-wide. This has resulted in a multitude of separate Federal data collection and display websites.

Leveraging the lessons learned from the Administration's transparency efforts, we have distilled the following key principles to guide us as we shine light on the \$3.7 trillion in all Federal spending.

1. **Build end-to-end digital processes** – Automate transfer of data between systems to increase productivity, protect data integrity, and speed data dissemination. Capitalize on game-changing technologies to increase transparency.
2. **Build once, use often** – Architect systems for reuse and share platforms to reduce costs, streamline systems and processes, reduce errors, and foster collaboration.
3. **Tap into golden sources of data** – Pull data directly from authoritative sources to improve data quality, shorten processes and protect data integrity.
4. **Release machine-readable data and encourage 3rd party applications** – Make data machine-readable to allow the public to easily analyze, visualize and use government information.
5. **Use common data standards** – Develop and use uniform, unique identifiers and data standards to ease the flow of data and reduce system complexity.
6. **Validate data up front** – Correct errors during collection and at the point of entry to block bad data from ever entering the system.
7. **Release data in real time and preserve for future use** – Release data as quickly as feasible to enhance its relevance and utility while maintaining future accessibility.
8. **Reduce burden** – Collect data once and use it repeatedly. Pull from existing data sets to reduce costs and burden and to increase productivity and uniformity.
9. **Protect privacy and security** – Safeguard the release of information to increase public trust, participation, preserve privacy, and protect national security. Open Government doesn't mean vulnerable government.
10. **Provide equal access and incorporate user feedback** – Provide a common view of data to all stakeholders to foster collaboration. Incorporate user feedback to help identify high-

² Fiscal Year 12 President's Budget Request.

value, meaningful data sets, set priorities, to continuously drive and improve future planning and processes.

Conclusion

As I reflect on the last two and a half years, the benefits of an open and transparent government are now clearer than ever before. We have saved \$3 billion by shining light on Federal IT spending so far. We have seen an unprecedented low fraud rate in the implementation of the Recovery Act by taking a transparent approach from the outset. We sparked a new “app economy” by releasing government data through Data.gov.

This Committee has long recognized the importance of an open and transparent government and I appreciate its ongoing support of our efforts and its help in securing funding for the government’s transparency efforts.

Going forward, it will take all of us – Congress, Executive branch agencies, and recipients of Federal funds – working together to ensure accuracy and transparency of government data. Thank you again for your interest and I am happy to answer your questions.

Mr. LANKFORD. Thank you.

Mr. Baker, you are recognized for 5 minutes.

STATEMENT OF ROGER BAKER

Mr. BAKER. Thank you, Chairman Lankford, Ranking Member Connolly and members of the subcommittee, thank you for inviting me to testify alongside my colleagues today.

As the Assistant Secretary for Information and Technology, the VACIO is uniquely positioned for a Federal CIO, controlling all IT resources and staff at the Federal Government's second largest department. In effect, the VACIO runs a \$3 billion IT services company, with its primary customers being the Health and Benefits Administrations at the VA.

In this role and as the former CEO of a private sector company, I bring an operational perspective to today's hearing. Since my confirmation in 2009, I have been a strong supporter of this administration's efforts to eliminate wasteful spending and implement real transparency in the way we do business.

Over the last 2 years, we have focused on running the VA IT organization like a company, driving the fiscal and IT process disciplines necessary to dramatically improve cost efficiency, reliability and customer satisfaction. In that effort, one of the key challenges has been the difference in financial management approaches between the private and the public sectors.

As a private sector CEO, I became accustomed to a constant flow of data regarding revenue, costs and cash-flow that provided an effective means for monitoring, measuring and forecasting the performance of projects, programs and business units within my organization. Effective cost accounting and strong financial management systems are the lifeblood of companies that must compete on a daily basis just to stay in business.

While the private sector is concerned with revenue, expenditures and cash-flow, the public sector focuses on appropriations and obligations. This results in core financial systems that, while performing exactly as intended, simply are not designed to provide the type of detailed, real time cost data necessary to effectively manage a business. To draw an analogy, managing IT projects using Federal financial systems is the equivalent of crossing Pennsylvania Avenue using a photograph taken 30 days ago.

Transparency, and particularly the IT Dashboard, has provided broad visibility to this problem. As the GAO aptly points out, the information VA systems originally provided to the IT Dashboard was frequently old or inaccurate. Of greater concern to me was that that information was precisely what was being used by IT managers and department leadership to manage our IT projects.

With strong encouragement from OMB and from VA's Deputy Secretary, we have implemented both short term and longer term projects to address these issues, including implementing several new systems that will better track actual costs, including labor hours at the project level.

The President's call for more transparency in government and this committee's work are important to making our government run better. Especially in these economic times, it is critical that our

financial management systems provide clear and accurate data that is as transparent as possible.

VA will continue to strive to excel at both management efficiency and transparency and build on the successes of our existing strong management and transparency efforts.

Again, thank you, Mr. Chairman, Mr. Ranking Member and committee members, once again, for the opportunity to be here today.

[The prepared statement of Mr. Baker follows:]

STATEMENT OF
ROGER W. BAKER
ASSISTANT SECRETARY FOR INFORMATION AND TECHNOLOGY
U.S. DEPARTMENT OF VETERANS AFFAIRS
BEFORE THE
SUB-COMMITTEE ON TECHNOLOGY, INFORMATION POLICY,
INTERGOVERNMENTAL RELATIONS AND PROCUREMENT REFORM
COMMITTEE ON OVERSIGHT AND GOVERNMENT REFORM
U.S. HOUSE OF REPRESENTATIVES
July 14, 2011

Chairman Lankford, Ranking Member Connolly, members of the Subcommittee: thank you for inviting me to testify alongside my colleagues regarding the Information Technology (IT) systems used to report spending at the Department of Veterans Affairs (VA). I appreciate the opportunity to discuss VA's efforts to provide transparency and accountability to program management and financial processes.

Prior to being confirmed as the Assistant Secretary for the Office of Information and Technology (OI&T), I was the Chief Executive Officer of a mid-sized (500-employee) technology company. I understand why strong financial management systems are necessary for effective management. Good financial management systems provide the ability to track and forecast revenue and costs in order to monitor performance. One of my frustrations in government is the differences in financial management priorities between the private and public sector.

As you know, Todd Grams, VA's Executive in Charge, Office of Management and Chief Financial Officer (CFO), provided this committee with a detailed breakdown of the electronic systems that support business and accounting functions, grants and loans management, contracts management, and reporting to government-wide systems in March of this year. The document detailed a number of processes and systems, some of which are automated and some of which are manual.

Over a number of years, VA attempted to build a new IT solution to modernize its financial and logistics management systems. The attempts carried names including Core Financial and Logistics System (CoreFLS), Financial and Logistics Integrated Technology Enterprise (FLITE), and Strategic Asset Management system (SAM). These efforts led to the highly publicized failure of CoreFLS, the cancellation of FLITE

and strategic pause of SAM. Soon after his arrival at VA, Mr. Grams and I decided that it would be a more prudent use of taxpayer dollars, and a lower risk investment, to cancel the \$423 million FLITE program before its award and focus on strengthening the systems and processes that feed into the current financial management system rather than to continue working to rebuild the entire financial management system. One factor in our decision was that it was not clear that FLITE would provide VA with any better tools for managing its operations than the current Financial Management System (FMS).

The primary area where private sector and public sector are different in terms of financial management is in the very basic way in which budgeting and financial tracking work. While private sector CEOs and CFOs are concerned with revenue and expenditures, public sector leaders focus on appropriations and obligations, making it difficult to match performance to expenditure. The lack of information technology cost data makes it difficult to develop a track record of what works well and what does not. Under my direction, VA IT is implementing the use of cost accounting data for IT products beginning in fiscal year 2012. This will allow VA to better manage and provide clear and transparent information to the Office of Management Budget, to Congress, and to the public.

Lacking strong financial tools, federal managers have to get creative in creating effective management approaches to tough problems. The introduction of our Program Management Accountability System (PMAS) at VA has dramatically changed the results of VA's IT investments by focusing our staff on metrics that can be accurately and objectively measured (time and functionality) versus those that cannot (cost and progress). Today, VA has 107 active development projects, tracked in real-time through a project database and dashboard that are meeting their milestone dates 79 percent of the time. PMAS exists primarily because federal financial systems do not provide the granularity needed to track staff, overhead, contract, and materiel costs accurately at a project level. PMAS principles enforce fiscal discipline by limiting software deliveries to six months or less, detecting and stopping wasteful programs early in their lifecycle. While project failures can still occur, we manage the timeline and work closely with our stakeholders to ensure projects do not fail for years on end before being stopped.

This hearing is about VA electronic systems that support business and accounting functions, grants and loans management, contracts management, and reporting to government-wide systems. Although Federal IT spending systems focus on tracking appropriations and obligations, VA is transparent in its financial stewardship and reporting. VA can accurately account for its obligations and outlays as evidenced by VA's 12 consecutive unqualified "clean" audit opinions on its consolidated financial statements. In addition, VA successfully closed three of its four audit material weaknesses in FY 2010. This demonstrates our commitment to improving our financial capabilities and is a testament to our ability to effectively account for the resources entrusted to us by the American taxpayer.

One area of improvement VA is working on is a replacement of our legacy Time and Attendance system. The current system is distributed to over 150 sites and gives VA no visibility over time and leave data agency wide. This project is on schedule and will be completed in 2013. Once deployed, VA will have unprecedented visibility into labor data, and for the first time be able to effectively use labor costs to improve budgeting and cost management across the board.

One of the Secretary's 16 key initiatives is to develop systems to drive performance. Over the past year, VA has implemented a managerial cost accounting dashboard to identify, present, and analyze the VA's most relevant cost and productivity information with management implications. The availability of this dashboard tool provides information to VA management so that more informed decisions can be made. This dashboard provides data on the top cost drivers for VA's administrations.

Although there is room for improvement, VA does have a process to monitor and track performance of its program performance, including their budgets and results, on a monthly basis. These monthly performance reviews are conducted by the Deputy Secretary and focus on every aspect of management and performance by line and staff offices using over 400 measures which report on our achievements in health care, benefits, memorial affairs, and IT programs, including customer satisfaction indices. When cost information at the enterprise level is available, it is an integral part of VA's performance reporting. The decisions emerging from these performance reviews lead directly to enhanced operations at lower cost. VA's approach is considered a model practice for other Federal agencies, and we actively share our approach with others.

The President's call for more transparency in government, and this Committee's work to ensure federal agencies are working to do so, are important to building public trust in government. Especially in these tough economic times, it is critical that our financial management systems provide clear and accurate data that is as transparent as possible. VA will continue to strive to excel at both management efficiency and transparency, building on the success of our existing strong transparency efforts. I thank the Chairman, Ranking Member, and Committee members once again for the opportunity to speak here today.

Mr. LANKFORD. Thank you, Mr. Baker.
Mr. Gross, you are recognized for 5 minutes.

STATEMENT OF LAWRENCE GROSS

Mr. GROSS. Thank you, Chairman Lankford and members of the subcommittee.

I appreciate the opportunity to appear before you today to present the Department of Interior's efforts to improve transparency through technology improvements and financial data standardization.

I am Lawrence Gross, and I am Deputy Chief Information Officer at the Department of the Interior. If I may, I would like to submit our full statement for the record and summarize our testimony.

Mr. Chairman, members of the committee, the Department of Interior has a unique public facing mission, that of protecting America's great outdoors and empowering our future. The Department protects America's natural resources and heritage, honors our cultures and tribal communities and supplies the energy to power our future.

In order to meet this unique mission requirement and engender the public trust now and into the future, cost effective, fully integrated, 21st Century technology must play a central role. The Department recognizes the critical role that technology and information quality plays in meeting our mission and as a result, have taken aggressive steps to provide 21st Century technologies to the Department employees and to improve the access and quality of data to the public.

Specifically, the Department has three major initiatives that will, over the next few years, retire duplicative financial management and reporting systems by moving forward to continue to retire and integrate enterprise-wide financial management systems. Specifically, we will be deploying the financial management business system; second, we will be modernizing our information technology infrastructure through our recently launched, self-funded IT modernization initiative, which we anticipate will result in savings to the public of \$500 million over a 4-year period; and third, an alignment with the Office of Management and Budget TechStat process, we have implemented a vigorous governance process that we call within DOI, IStat.

This process will improve the management and oversight of the Department's IT investment portfolio. Mr. Chairman, the Department fully understands the budget environment and we are confident that these initiatives will contain costs and significantly improve the Department's ability to meet its mission and to fulfill the demands of the public for transparent access into the operations of the Department.

I welcome any questions you or members of the committee may have. Thank you.

[The prepared statement of Mr. Gross follows:]

STATEMENT OF LAWRENCE GROSS
DEPUTY CHIEF INFORMATION OFFICER
U.S. DEPARTMENT OF THE INTERIOR

BEFORE THE

HOUSE COMMITTEE ON OVERSIGHT AND GOVERNMENTAL REFORM
SUBCOMMITTEE ON TECHNOLOGY, INFORMATION POLICY,
INTERGOVERNMENTAL RELATIONS AND PROCUREMENT REFORM
JULY 14, 2011

Mr. Chairman, Ranking Member Connolly, and members of the Subcommittee, thank you for the opportunity to testify today before the Subcommittee on the Department of the Interior's efforts to improve transparency through technology improvements and financial data standardization.

The Department of the Interior (Department) recognizes the benefits of transparency to the agency mission and the public and is taking active steps to improve its IT services and underlying business processes to increase efficiency and improve the quality of data it reports and provides to the public. Transparency into agency operations and data standardization increases program efficiency and delivery of services and promotes trust with the public.

The IT Dashboard, one of the Open Government initiatives, has resulted in changes in how the Department reports and manages Capital Information Technology Investments. Specifically, the Department has revamped its Capital Investment governance process to increase visibility, and to provide for early intervention and program termination for investments that fail to deliver targeted results.

The Department welcomes the Administration's and this Subcommittee's continued efforts to promote Open Government and transparency into government operations to increase accountability and program effectiveness.

Initial Steps to Standardize and Promote Efficiency - FBMS

Currently about 40 percent of the Department's bureaus and offices are using the Financial and Business Management System (FBMS), which includes the following functionality: core financial; acquisition; personal property; real property; fleet management; travel; financial assistance; enterprise management information; and reporting. This system standardizes business processes and expands functionality for many of the Department's operating bureaus and offices. It also improves effectiveness and efficiency, information technology, internal controls, and management reporting using a consistent platform and standardized information. The following Departmental entities are currently deployed to FBMS include;

- The Bureau of Land Management
- The Bureau of Ocean Energy Management, Regulation and Enforcement
- The Office of Surface Mining, and
- The U.S. Geological Survey.

The rest of the Department is in the process of retiring multiple legacy financial property, acquisition, and other systems and converting to FBMS. The next deployment will occur in November 2011 for the Fish and Wildlife Service and for the Office of the Secretary and its multiple organizations, including the Office of the Special Trustee, the Office of Inspector General and the Office of the Solicitor. Deployment for the National Park Service and the Bureau of Indian Affairs is scheduled for November 2012 and the deployment for the Bureau of Reclamation is planned to take place the following year.

FBMS supports all aspects of federal accounting and with its deployment will position the Department to improve reporting, normalize data elements and seamlessly exchange data with Open Government solutions such as Data.gov, IT Dashboard, Recovery.Gov and other Administration-wide initiatives

Secretarial Order # 3309 – Transforming the DOI IT Service Delivery Model to Improve Program Efficiency and Effectiveness

Mr. Chairman, on December 14, 2011, Secretary Salazar signed Department of the Interior, Secretarial Order 3309. Secretarial Order 3309 resulted in broad leadership changes in IT leadership within the Department and called for a multi-year plan to modernize the Department's IT systems by providing 21st century technology to the employees, improving mission effectiveness, and reducing infrastructure. The Secretarial Order was issued to modernize the Department's Information Technology program. The infusion of 21st century technology will improve mission effectiveness, and reduce duplication to better serve the public.

Secretarial Order 3309 sets the Department on a four-year trajectory to reduce significantly the Department's IT infrastructure and transform the Department into a cost effective, modern IT services delivery organization capable of delivering common IT services on an enterprise-wide level. The Department's current fragmented IT service delivery model makes it difficult to establish the common data architectures necessary to promote transparency and facilitate seamless system to system information exchange. Adoption and delivery of common enterprise-wide solutions centrally should facilitate the Department's ability to implement data standardization and share information seamlessly across the Department and with the public.

On June 31, 2011, the Chief Information Officer delivered to Secretary Salazar a four-year IT Transformation Strategic Plan. The strategic plan is a high-level roadmap to transform the Interior's IT operations for the 21st century, using advances in technology to provide better service for less. The plan identifies an initial set of high priority IT services as part of the transformation process, including a single email system for the department, telecommunications, account management, hosting services, workplace computing services, risk management, and an enterprise service desk (help desk).

The Department estimates that the initiative will produce \$100 million in annual savings from 2016 to 2020, for a cumulative total of \$500 million. Major cost-savings are expected from:

- a 45 percent reduction in the number of data centers;
- a single email system that will cut email system costs by half while improving its overall effectiveness;
- a Cloud-based electronic forms system; and
- Cloud-based electronic records, documents and content management solutions.

The transformation will be self-funded, in part by capturing savings that are realized through IT efficiencies and reinvesting those funds into subsequent phases of transformation.

This plan builds upon President Obama's Executive Order directing the Administration to leverage technology to strengthen and streamline service and make government work better for the American people. In June, the President and Vice President launched the Campaign to Cut Waste, an Administration-wide initiative to root out waste and identify efficiencies across all agencies in the Federal government.

The Department will form bureau-led teams to help design the way IT services will be delivered and managed. Professionals from within the Department will be involved at every level in order to ensure that the IT Transformation introduces services that meet the needs of customers and can be implemented with minimal disruption on mission-related programs.

This strategic plan fully supports the Open Government and transparency initiatives by normalizing enterprise-wide systems, standardizing data elements resulting in improved reporting, and improving information quality.

Governance – Capital IT Investment Review "IStat"

Corporate governance of IT across the Department enterprise historically was managed using a federated model. This model produced mixed results. Investments were reviewed with an emphasis on cost, schedule and performance. Very few investments with poor results were terminated for failure to deliver targeted results.

The introduction of USASpending.gov highlighted programs that were over budget, or failing to meet their targets. Troubled investments were singled out to develop mitigation strategies that focused on delivery of frequent incremental capability. Programs unable to deliver frequent incremental capability outlined in its mitigation strategy faced termination. Deemphasizing long term plans for capability delivery to a shorter window for the delivery of capability allowed for frequent windows of opportunity to intervene and terminate the investment earlier in its lifecycle, if needed. As a result of the Open Government initiative USASpending.gov, the Department has noticed a marked improvement in the accuracy and quality of information relative to the Department's IT spending.

USASpending.gov, in conjunction with OMB's Investment Review process (Techstat) placed a renewed focus on the Department's IT investment review governance process. Techstat emphasized early intervention and incremental delivery of results, while the dashboard provided a venue for high level visibility into agency IT investment portfolios.

Recognizing the need to strengthen corporate IT governance, the Department was an early adopter of the Techstat Investment review process. The Department launched a new IT Governance process called "IStat" modeled after the OMB, Techstat investment review process. IStat following the OMB model, and introduced rigor into the investment review process.

The Department's IStat process has several successes, including the termination of an investment and the turn-around of a troubled investment that was behind schedule and at risk of failing to meet targeted goals. These early successes resulted in savings for the American taxpayer and allowed for the redirection of funding to other critical investments within the Department's IT portfolio.

The Department continues to improve the IStat Investment review and governance process. It is envisioned that over time, the process will be used to evaluate “all” investments in the portfolio, not just “troubled” investments.

Conclusion

Mr. Chairman, the Department, through its modernization efforts, its revised governance framework resulting from the OMB Techstat, and continued enterprise-wide deployment of FBMS, is positioned to facilitate transparency now and in the future. The improvements will benefit the Department’s operations and reporting ability through standardization of data elements. The Department and the public have benefited from the Open Government initiatives. As a result we welcome the continued efforts of this Subcommittee to drive transparency and promote open government.

I am prepared to address any questions you or members of the Subcommittee may have.

Chairman LANKFORD. Thank you, Mr. Gross.
Mr. Barwell, you are recognized for 5 minutes.

STATEMENT OF OWEN BARWELL

Mr. BARWELL. Good afternoon, Mr. Chairman, Ranking Member Connolly, and members of the subcommittee.

Thank you for the opportunity to speak about the Department of Energy's business systems. I would like to start by providing a brief overview of them.

In January 2003, the Department launched the Integrated Management Navigation System, now known as iManage, to consolidate, standardize and streamline the Department's business and finance systems and processes. The functions and scope of this effort include finance and cost accounting, travel, payroll, budget formulation and execution, procurement and contracts management, facilities management, human capital and information management.

Today, the strategic objectives for iManage are connecting our people, simplifying our work and liberating our data, and we continue to work to improve financial and business systems and to use these systems to provide greater transparency in support of Presidential priorities.

The full suite of systems was substantially deployed in 2008. Since then, the iManage program has continued to invest in software upgrades and operational performance improvements pursuant to an integrated enterprise architecture. The core of our business systems is the iManage Data Warehouse, IDW, the central data warehouse that links common data elements from each of the Department's corporate business systems.

IDW serves as a knowledge bank of information about programs and projects including budget execution, accumulated costs, performance achieved and critical milestones met. As a key component of the iManage program, the Department relies heavily on IDW for executive management and operational reporting, as well as for external requests for data.

While our work is not done, I think it is important to recognize our accomplishments in deploying and integrating these systems and tools. For example, one of the key outcomes of implementing the STARS Accounting System has been that the Department has received a clean audit opinion since fiscal year 2007 based on the consolidated financial statements generated by STARS.

Also, since 2008 when STRIPES, our procurement system, first came online, the Department had made 29,000 separate grant awards totaling \$40 billion, including significant funding under the American Recovery and Reinvestment Act. During that same time, the Department has also made 67,000 contract actions worth a total of \$47 billion.

The real test of these systems came in implementing the Recovery Act, providing transparency of our performance through recovery.gov. We helped over 4,500 Recovery Act recipients submit quality and accurate information into FederalReporting.gov for public viewing. The information was also cross-checked internally using our business intelligence tools to identify and address any data quality issues.

The advantage of having STRIPES fully deployed has been the increased speed and accuracy of procurement as well as increased vendor participation. By enhancing the integration and interoperability of our acquisition and financial systems, workload performed by the financial personnel was reduced and in some cases, eliminated.

In addition to these accomplishments, I would like to highlight our integration with governmentwide corporate systems. While an ongoing effort, it is important to note that the Department's deployment of iManage has taken the need for governmentwide systems' interoperability into account.

STARS, our accounting system, is fully integrated with governmentwide financial reporting systems, FACTS I and FACTS II operated by the Department of the Treasury. Our Funds Distribution System uploads information directly to the Office of Management and Budget's MAX system to expedite apportionments. STRIPES interfaces with governmentwide procurement systems, including Grants.gov, FedConnect, Federal Business Opportunities and USASpending.gov.

As I have mentioned, the Department's efforts to improve its financial systems is unfinished business and challenges associated with implementing systems, business processes and organizational changes remain. With each successive system upgrade or integration effort, we learn from our experience and apply the lessons we have learned in a rigorous and systematic way to increase the likely success of what we do.

To address these challenges, the Department is working to continue to improve the capability, integration and transparency of our systems within the constraints of the Department's resources. iManage 2.0, the second generation of the program now being deployed, is shifting much of its focus from collecting and storing data to analytical and other value-added functionality to support the Department's mission.

Mr. Chairman, Ranking Member Connolly and members of the subcommittee, I am pleased to be here today representing the Department of Energy and I am pleased to answer any questions that you may have.

[The prepared statement of Mr. Barwell follows:]

**Written Statement of Owen Barwell
Acting Chief Financial Officer
United States Department of Energy
Before the Subcommittee on Technology, Information Policy,
Intergovernmental Relations and Procurement Reform
Committee on Oversight and Government Reform
United States House of Representatives**

July 14, 2011

Good afternoon, Mr. Chairman, Ranking Member Connolly, and Members of the Subcommittee. Thank you for the opportunity to speak about the Department of Energy's (Department or DOE) financial information systems and how they are integrated with government-wide systems. We have taken significant measures to meet new reporting requirements and provide data to several government-wide systems as well as ensure the transparency needed for better financial management within the Department is supported through our systems.

Overview of the Department's Financial Information Systems

In January 2003, the Department launched the Integrated Management Navigation System, iManage, to consolidate and streamline DOE business systems by integrating management information related to financial and cost accounting, travel, payroll, budget formulation and execution, procurement and contracts management, facilities management, human resources, and research and development. Since that time, we have implemented an integrated solution for managing enterprise-wide corporate business systems and information in the Department. The primary objectives of iManage are to improve financial and business system and processing efficiencies, enhance decision-making capabilities, deploy collaboration and social networking tools, and expand transparent electronic government in support of Presidential priorities. The iManage strategic theme is "Connecting our People, Simplifying our Work, and Liberating our Data." The full suite of systems was substantially deployed in 2008; since then, the iManage program has continued to invest in software upgrades and operational performance improvement.

A fully implemented iManage Program supports the accomplishment of the Department's Strategic goal to "Enable Mission through Sound Management." The iManage Program incorporates the core, enterprise-wide projects (subsystems) from three collaborating Department headquarters organizations: Office of the Chief Financial Officer, Office of Human Capital Management, and the Office of Management.

iManage is supported at the core by a portal/central data warehouse that links common data elements from each of the Department's business systems and supports both external and internal reporting. The Project Portfolio is comprised of enterprise-wide systems initiatives to include: the Standard Accounting and Reporting System (STARS), iManage Data Warehouse (IDW), iBudget, Strategic Integrated Procurement Enterprise System (STRIPES), Corporate Human Resource Information System (CHRIS), and the E-Travel System (eTS).

By managing each of these projects in the iManage program portfolio, iManage provides visibility and understanding of interrelationships, costs/benefits, and dependencies; ensures common goals and objectives are identified and followed; eliminates redundant systems and data; and provides for more efficient use of finite human resources.

Key System Elements

The Standard Accounting and Reporting System (STARS) provides the Department with a modern, comprehensive, and responsive financial management system that is the foundation for linking budget formulation, budget execution, financial accounting, financial reporting, cost accounting, and performance measurement.

STARS processes DOE accounting information, including General Ledger, Purchasing, Accounts Payable, Accounts Receivable, and Fixed Assets. The system also includes the budget execution functionality for recording appropriations, apportionments, allotments, allocations, and provides funds control for commitments, obligations, costs, and payments.

STARS is used by all DOE Headquarters and Field Organizations except for the Power Marketing Administrations (PMA). The system generates the Department's Consolidated Financial Statements, which includes the PMA data. Mandatory external reporting requirements including the SF-224 Statement of Transactions, FMS 2108 Year-End Closing Statement, and the SF-133 Report on Budget Execution are also generated from STARS.

The Strategic Integration Procurement Enterprise System (STRIPES) provides the Department with a standard system for all activities required or directly associated with planning, awarding, and administering various unclassified acquisition and financial assistance instruments. In general terms, the required activities are comprised of the following functions: acquisition/financial assistance planning; pre-solicitation documentation generation; solicitation development; evaluation and award; administration, including approving payment requests; and instrument closeout. STRIPES is an important component of the overall vision of the iManage program and has reduced the number of procurement-related electronic systems across the Department. STRIPES serves the following functions:

- Connects DOE with the Integrated Acquisition Environment, Grants.gov, FedConnect, and other iManage projects such as STARS and IDW;
- Improves the efficiency and effectiveness of awarding and administering acquisition and financial assistance instruments;
- Improves the ability of all program offices to perform DOE missions; and
- Utilizes existing enterprise financial management functionality to provide an integrated, comprehensive solution.

The Procurement and Assistance Data System (PADS) is a legacy system that collects, validates, tracks and reports procurement and financial assistance actions for the Department. These functions have been transitioning to STRIPES and the IDW; however, PADS is still used for official financial assistance reporting to USASpending.gov.

The Industry Interactive Procurement Systems (IIPS) is used to record, publish, and procure external contractual business transactions within DOE. Such transactions entail the viewing of current business opportunities, registering to submit proposals, and obtaining information and guidance on the acquisition and financial assistance award process. The functions of IIPS have also been transitioning to STRIPES.

The Funds Distribution System (FDS) is an online, interactive, financial system that provides for the receipt, control, and distribution of all obligational authority available to DOE.

iBudget is a Government off-the-shelf (GOTS) budget formulation system that DOE is implementing over several phases. The GOTS system, called Budget Formulation and Execution Manager, or BFEM, was developed and is maintained by the Department of Treasury, and is currently being used by several other federal agencies. DOE is implementing this system to achieve the following:

- Streamline business processes;
- Consolidate corporate budget data and support higher level reviews through collection of sub-organization budget requests, modifications, and justifications;
- Produce budget submissions and support the refinement of sub-organization budget submissions;
- Produce the Congressional Budget Justification and Budget Highlights;
- Enable tracking of changes (e.g., by Congress) to the budget during the budget review process;
- Allow for the creation of budget sets that can be defined for maintaining distinct phases of the budget process; and
- Integrate with DOE's IDW for additional analysis and reporting.

The iManage Data Warehouse (IDW) is a corporate enterprise system integrating financial, budgetary, procurement, personnel and program information. It is a central data warehouse that links common data elements from each of the Department's corporate business systems and serves as a "knowledge bank" of information about portfolios, programs or projects including budget execution, accumulated costs, performance achieved, and critical milestones met. The IDW Portal provides personalized dashboards, messaging (thresholds/alerts), reporting, graphing, and data exchange capabilities.

IDW contains critical information from multiple corporate systems including human resources, payroll, procurement, financial management and financial management legacy systems. This data is integrated, aggregated and summarized to provide mission critical reporting and query capability.

As a key component of the iManage Program, the Department relies on IDW for internal executive, management, and operational reporting, as well as for external ad-hoc requests for data. This data-centric approach to managing and integrating data allows the Department to rapidly respond to new and changing demands for information. IDW provides the ability to integrate information from all organizational elements in a single corporate repository.

Accomplishments

STARS

One of the key outcomes of implementing STARS has been that DOE has received a clean audit opinion since fiscal year 2007 based on the Consolidated Financial Statements generated from the system. With our legacy systems, DOE had received unqualified audit opinions in fiscal years 1996, 1997, and again in fiscal years 1999 through 2004 (the opinion in fiscal year 1998 was qualified based on Environmental Liabilities). With the mid-year implementation of STARS in fiscal year 2005, there wasn't sufficient time to transition to a new system with a new accounting structure, and to bring the auditors to level of understanding of the STARS functionality to retain the clean audit opinion.

Losing our clean audit opinion in fiscal year 2005 prompted management to create a Tiger Team to research all of the problems with STARS and to come up with an aggressive Corrective Action Plan. The Tiger Team reported 30 critical issues that they divided into three categories: People, Process, and Technology. Of the total critical issues reported, five were related with the technology, the remaining issues were related to outdated/unchanged processes and lack of training. Another contributing factor was that the Department performed a Competitive Sourcing A-76 reorganization of Accounting Operations at the same time STARS was deployed.

STRIPES

Since 2008, when STRIPES first came online, the Department has made 29,000 separate grant awards totaling \$40 billion, including significant funding under the American Recovery and Reinvestment Act (Recovery Act). During this same time, the Department has made almost 67,000 contract actions worth a total of \$47 billion. In addition, almost 90,000 contracting actions, across all award types, in STRIPES have resulted in obligations of nearly \$55 billion in the STARS system. Furthermore, STRIPES is fully integrated with FedConnect, a secure web portal that links government acquisition and grants professionals with their vendor and grant applicant communities, transmitting 64,000 transactions from STRIPES to FedConnect from 2008 until present. STRIPES is also currently transmitting over 12,000 transactions per year to the Federal Procurement Data System – Next Generation (FPDS-NG), a centralized, government-wide database containing information on all contracting actions with a value of \$3,000 or more.

Recovery Act

The level of transparency and integration achieved by the Department was apparent during the implementation of the Recovery Act. DOE met the demanding Recovery Act requirements and demanding timelines in part because of its investment in iManage and the modernization of its corporate systems. For example, the flexibility already defined in our accounting system made it very easy to capture the information needed for valuable reporting and transparency.

DOE's Business Intelligence tools within iManage allowed us to automatically send out daily financial reports (viewable on mobile phones) on DOE projects funded under the Recovery Act

to Congress and DOE executives. Additional financial, earned value management, performance, and risk information was made available on DOE's iPortal – the DOE enterprise web portal that displays performance dashboards which are accessible not only by DOE employees, but also the Government Accountability Office (GAO)—a true model of transparency that reduces data calls. Furthermore, DOE was able to link its procurement and financial systems together for Recovery Act actions to allow greater visibility into all Recovery Act recipients that was also made available to the public on-line. DOE's system integration allowed in depth cross cutting analysis.

Another example of how DOE system integration proved invaluable during the Recovery Act is how DOE helped over 4,500 DOE recipients submit quality and accurate information into FederalReporting.gov for public viewing. The information was also cross-checked using DOE's Business Intelligence tools to help us review what recipients were reporting to Fedreporting.gov versus what was being reported in STARS. Because of the timing of invoices we knew it would be difficult to reconcile data in real-time between the two systems. So, we used our BI tools to automatically send out emails to DOE Contracting Officer Representatives when large discrepancies existed between the two systems. This allowed DOE to "manage by exception" and did not have to waste time reviewing areas that didn't need attention.

One of the qualitative benefits of STRIPES was evidenced by the increased procurement speed and accuracy as well as increased vendor participation as it relates to the processing of the tremendous volume of procurement activities resulting from the Recovery Act. By enhancing the interoperability of the acquisition and financial systems and integrated STRIPES with STARS, previous workload performed by the financial personnel was reduced and in some cases eliminated.

Synchronization with Federal Corporate Systems

The Department's systems are integrated with government-wide systems on an increasingly automated basis. The current status of these ongoing integration efforts is provided below.

(STARS)

STARS information is provided to FACTS I and the Government-wide Financial Report System (GFRS) annually, and FACTS II on a quarterly basis as required by Treasury. The Intra-governmental Fiduciary Confirmation System (IFCS) interagency balances are submitted quarterly for the first three quarters. Treasury utilizes the year-end GFRS submission in lieu of a separate fourth quarter IFCS submission. Information is uploaded automatically to FACTS I, FACTS II, and IFCS systems. Information is manually entered into GFRS.

Information from FDS is uploaded into the MAX Apportionment System to request apportionment/reapportionment. This occurs at least twice per fiscal year for each Treasury Appropriation Fund Symbol (TAFS). The number of apportionments varies among TAFS, ranging from two a year, to ten or more per fiscal year.

The Reports on Budget Execution and Budgetary Resources, or SF-133s, are generated from STARS on a quarterly basis and submitted to Treasury's FACTS II system which feeds directly to OMB's MAX system.

(STRIPEs)

STRIPEs interfaces with the Grants.gov system via a two-way data transfer. First, DOE uses STRIPEs to query Grants.gov for a list of grant applications submitted by applicants against grant opportunities posted by the agency on Grants.gov. Second, DOE uses STRIPEs to retrieve all applications matching its query and assigns a unique agency tracking number to each application. In addition, once an application is successfully retrieved, STRIPEs acknowledges its receipt to allow Grants.gov to initiate the disposal phase of the application. Grants.gov maintains the files associated with a grant application for a limited duration.

STRIPEs is also integrated with FedConnect and Federal Business Opportunities for the "front end" of the procurement process – providing a centralized location outside the Department for publication of solicitation notices. STRIPEs also is connected with government-wide systems regarding the award and modification of contracts, grants and other arrangements, including the Federal Assistance Award Data System (FAADS) and the FPDS-NG. Through February 2011, when the reporting requirement was terminated, FAADS data was uploaded via DOE's PADS using a batch process on a quarterly basis. This information is now provided to USASpending.gov in a similar format. STRIPEs information is interfaced directly to FPDS-NG. Additional information is manually entered into FPDS-NG prior to the award or modification being issued. FPDS-NG then feeds data to the Federal Funding Accountability and Transparency Act (FFATA) Subaward Reporting System (FSRS), which feeds data to USASpending.gov.

Challenges to Integration

The Department's efforts to improve its financial systems have shown that the most challenging aspect of integration is change, and how change is managed. Often, the most challenging aspects of deploying and integrating business systems are helping organizations to manage change and to implement new business processes. With each iManage system implementation, there were lessons learned that improved the next system to be implemented. The major lessons learned were:

- Executive Sponsorship – Secure buy-in from the highest career-level positions;
- Funding – Build in reserve and do not discount the importance of setting realistic expectations, managing change, and training the staff;
- Adequate Staffing – Manage staff by assigning specific tasks with due dates, not on the amount of time spent on the project;
- Cultural Change – Change is hard, and communication is the key ingredient to acceptance; and
- Continuous improvement – knowing that once new systems and processes are in place, there is still room for improvement.

With each successive system upgrade or integration effort, these lessons are being applied in a rigorous and systematic way to reduce costs and increase functionality and ease of use.

Way Ahead

The Department is working to constantly improve the capability, integration, and transparency of our systems within the constraints of the Department's resources. iManage 1.0 was primarily focused of the modernization, integration and implementation of the Department's corporate financial and business systems. Significant accomplishments have been made in this area and additional work is in progress to complete the modernization of all business systems. iManage 2.0 is now shifting much of the focus to the value of providing products and services to support the Department's strategic vision, mission and decision-making, and interactive peer-to-peer participation. iManage must also address future workforce needs, specifically, by decreasing the iManage training learning curve through improved access to training; increasing access to experts and peers; utilizing a robust and secure web and remote access; and improving access to systems and information.

Within iManage, STARS and STRIPES are both undergoing their periodic upgrades to increase functionality and integration. Within our procurement systems, and as noted above, the functions of PADS and IIPS are both being migrated to STRIPES. FDS was recently migrated from a mainframe environment to a server environment and the database migration to Oracle Version 11 is currently being tested. The overall funds distribution process has undergone a rigorous Lean Six Sigma review that has identified a number of areas for increased efficiency and reduced transaction processing time. This evaluation has resulted in an ongoing upgrade to FDS that will better integrate this system with IDW and STARS; the upgrade is expected to be complete in late 2011. Finally, the Budget Formulation and Execution Line of Business solution developed by Treasury called Budget Formulation and Execution Module will be deployed at DOE to support the fiscal year 2013 Budget Formulation Process.

Conclusion

Mr. Chairman, Ranking Member Connolly, and Members of the Subcommittee, I am pleased to be here today representing the Department of Energy. Over the last several years, the Department has made significant strides integrating our financial systems both internally and with government-wide initiatives. We still have work to do in this area and we are committed to doing it as cost-effectively and efficiently as possible to further increase transparency, improve management and decision-making, and demonstrate value to the American taxpayers. I am pleased to answer any questions you may have.

Mr. LANKFORD. Thank you, Mr. Barwell.
 Mr. Willemssen, you are now recognized for 5 minutes.

STATEMENT OF JOEL WILLEMSEN

Mr. WILLEMSEN. Thank you, Mr. Chairman, Ranking Member Connolly and Congressmen. Thank you for inviting us to testify today.

As requested, I will briefly summarize our statement on two OMB Web sites, the IT Dashboard and USASpending.

OMB's IT Dashboard displays detailed information on about 800 major Federal IT investments, including assessments of actual performance against cost and schedule targets. For example, as of March 2011, the Dashboard had slightly over 300 major investments in need of attention. Specifically, 272 investments representing \$17.7 billion in fiscal year 2011 spending were rated as yellow and needing attention, and 39 at about 2 billion were rated as red with significant concerns.

Looking at the site yesterday, we note that since March, the dollar figures for yellow ratings decreased by about \$4 billion, but the red ratings, meaning significant concerns, nearly doubled from 2 billion to 3.8 billion.

As noted by the Federal CIO, the Dashboard has greatly improved transparency of IT investment performance. However, our reviews have also found that the data on the Dashboard are not always accurate. Specifically, in reviews of selected investments from 10 agencies, the Dashboard ratings were not always consistent with agency performance data.

To address these issues, we made recommendations to the agencies to comply with OMB's guidance to standardize activity reporting, to provide complete and accurate data to the Dashboard on a monthly basis, and to ensure that CIO ratings disclose issues that could undermine the accuracy of investment data. We also made several recommendations for improvements to OMB.

Drawing on the information provided by the Dashboard, OMB has initiated efforts to improve the management of IT investments needing attention. According to OMB, these efforts have enabled the government to improve or terminate IT projects experiencing problems and along with other OMB reviews, have resulted in a \$3 billion reduction in life cycle costs.

Our recent and ongoing work has identified other opportunities for using the Dashboard to increase efficiencies and savings. For example, the Dashboard showed that as of yesterday, Federal agencies were investing in hundreds of systems with similar functions such as over 600 human resource management systems costing an estimated \$2.45 billion for fiscal year 2011 and almost 100 public affairs systems at about \$226 million for FY-11.

While the Dashboard focuses on IT investments, OMB has another reporting mechanism, USASpending.gov, that provides detailed information on Federal awards such as contracts, loans and grants. Last year, we reported on this Web site. Among our findings was that in a random sample of 100 awards, numerous inconsistencies existed between USASpending and the records provided by the awarding agencies.

Each of the 100 awards had at least one required data field that was blank or inconsistent with agency records. These errors could be attributed in part to a lack of specific OMB guidance on how agencies should fill in certain fields and how they should validate their data submissions. Accordingly, we recommended that OMB include all required data on the site and share complete reporting and clarify verification guidance.

OMB subsequently issued guidance to improve the quality of the data, although we have not subsequently gone in and tested a sample of that data against underlying agency records.

That concludes the summary of my statement and I look forward to your questions.

Thank you.

[The prepared statement of Mr. Willemsen follows:]

United States Government Accountability Office

GAO

Testimony

Before the Subcommittee on Technology, Information
Policy, Intergovernmental Relations and Procurement
Reform, Committee on Oversight and Government Reform,
House of Representatives

For Release on Delivery
Expected at 1:30 p.m. EDT
July 14, 2011

INFORMATION
TECHNOLOGY

Continued Attention Needed
to Accurately Report Federal
Spending and Improve
Management

Statement of Joel C. Willemsen
Managing Director, Information Technology



GAO-11-831T



Highlights of GAO-11-831T, a testimony before the Subcommittee on Technology, Information Policy, Intergovernmental Relations, and Procurement Reform, Committee on Oversight and Government Reform, House of Representatives

Why GAO Did This Study

A long-standing goal of Congress has been to improve the performance and transparency of the federal government through the use of information technology (IT). The Office of Management and Budget (OMB) plays a key role in improving the transparency and oversight of federal investments. Given the size of these investments and their importance to the health, economy, and security of the nation, it is critical for OMB and federal agencies to provide appropriate program oversight and ensure adequate transparency.

GAO was asked to testify on IT systems used by federal agencies to report spending. To prepare this statement, GAO drew on previously published work on two government reporting mechanisms—an IT Dashboard and USAspending.gov. These public Web sites were deployed by OMB in June 2009 and December 2007, respectively.

The Dashboard provides detailed information on approximately 800 major federal IT investments, including assessments of these investments' performance against cost and schedule targets (referred to as ratings). USAspending.gov contains data on federal awards (e.g., contracts, loans, and grants) across the federal government.

View GAO-11-831T or key components. For more information, contact Joel C. Willemsen at (202) 512-6253 or willemsenj@gao.gov.

July 14, 2011

INFORMATION TECHNOLOGY

Continued Attention Needed to Accurately Report Federal Spending and Improve Management

What GAO Found

In June 2009, OMB deployed the IT Dashboard Web site to improve the transparency into and oversight of federal agencies' IT investments. This site displays detailed information on major IT investments, including assessments of actual performance against cost and schedule targets. According to OMB, these data are intended to provide a near real-time perspective on the performance of these investments. The Dashboard has drawn additional attention to over 300 troubled IT investments at federal agencies, totaling \$20 billion. The Federal Chief Information Officer (CIO) recognized that the Dashboard has increased the accountability of agency CIOs and established much-needed visibility into investment performance. However, GAO has found that the data on the Dashboard were not always accurate. Specifically, in reviews of selected investments from 10 agencies, GAO found that the Dashboard ratings were not always consistent with agency cost and schedule performance data. In these reports GAO made a number of recommendations to OMB and federal agencies to improve the accuracy of Dashboard ratings. Agencies and OMB agreed with almost all of these recommendations.

Using the Dashboard, OMB initiated efforts to improve the management of IT investments needing attention. Specifically, beginning in January 2010, the Federal CIO initiated reviews—known as "TechStat" sessions—of selected IT investments involving OMB and agency leadership and which, according to OMB officials, have resulted in improvements to or termination of some investments. Further, OMB identified 26 high-priority IT projects and plans to develop corrective action plans with agencies at future TechStat sessions. According to the Federal CIO, OMB's efforts have already resulted in \$3 billion in savings. Lastly, recent and ongoing GAO work has identified additional opportunities for using the Dashboard to increase operational efficiency and realize cost savings, such as by identifying duplicative investments. Continued OMB oversight, along with the implementation of outstanding GAO recommendations, could result in further significant savings and increased efficiency.

In responding to a statutory requirement, OMB deployed USAspending.gov in December 2007. This site provides details on over \$1 trillion in contracts and financial assistance awarded annually by federal agencies. However, in March 2010, GAO found that agencies did not always report awards on USAspending.gov and that numerous inconsistencies existed between USAspending.gov data and agency records. These errors were due to a reliance on voluntary agency compliance and a lack of specific guidance. Accordingly, GAO recommended that OMB ensure complete reporting and clarify guidance for verifying agency-reported data. OMB generally agreed with GAO's findings and recommendations. Since then, OMB has issued guidance to federal agencies on improving the data quality of federal spending information, including developing data quality plans.

July 14, 2011

Chairman Lankford, Ranking Member Connolly, and Members of the Subcommittee:

I am pleased to be here today to discuss the federal government's key activities and efforts to improve the transparency and oversight of information technology (IT) and other investments—IT spending in particular totaled an estimated \$79 billion in the President's Budget for fiscal year 2011. Given the size of these investments and the criticality of many of these systems to the health, economy, and security of the nation, it is important that the Office of Management and Budget (OMB) and federal agencies provide appropriate oversight of and adequate transparency into these programs.

During the past several years, we have issued multiple reports and testimonies on OMB's initiatives to highlight troubled projects, justify IT investments, and encourage the use of project management tools.¹ We made numerous recommendations to OMB and to federal agencies to improve these initiatives to further enhance the transparency, oversight, and management of IT projects.

As part of its response to our prior work, OMB deployed a public Web site in June 2009, known as the IT Dashboard, which provides

¹See for example, GAO, *Information Technology: OMB Has Made Improvements to Its Dashboard, but Further Work Is Needed by Agencies and OMB to Ensure Data Accuracy*, GAO-11-262 (Washington, D.C.: Mar. 15, 2011); *Information Technology: OMB's Dashboard Has Increased Transparency and Oversight, but Improvements Needed*, GAO-10-701 (Washington, D.C.: Jul. 16, 2010); *Information Technology: Federal Agencies Need to Strengthen Investment Board Oversight of Poorly Planned and Performing Projects*, GAO-09-566 (Washington, D.C.: June 30, 2009); *Information Technology: Management and Oversight of Projects Totalling Billions of Dollars Need Attention*, GAO-09-624T (Washington, D.C.: Apr. 28, 2009); *Information Technology: Agencies and OMB Should Strengthen Processes for Identifying and Overseeing High Risk Projects*, GAO-06-647 (Washington, D.C.: June 15, 2006).

detailed information on federal agencies' major IT investments,² including assessments of actual performance against cost and schedule targets (referred to as ratings) for approximately 800 major federal IT investments.

In addition, Congress passed the Federal Funding Accountability and Transparency Act (FFATA) of 2006,³ which, among other things, required OMB to establish a free, publicly accessible Web site containing data on federal awards (e.g., contracts, loans, and grants) across the government. This site was deployed by OMB in December 2007 and is known as USAspending.gov.

You asked us to testify on IT systems that federal agencies use to report spending, including performance relative to planned and actual expenditures. In this regard, my testimony specifically covers the two key government reporting mechanisms mentioned above. In preparing this testimony, we relied on prior GAO reports and testimonies that assessed the implementation of the IT Dashboard and USAspending.gov, as well as the government's management of IT investments, including agencies' oversight boards and use of project management tools.⁴ All of our work for these reports and

²Major IT Investment means a system or an acquisition requiring special management attention because it: has significant importance to the mission or function of the agency, a component of the agency, or another organization; is for financial management and obligates more than \$500,000 annually; has significant program or policy implications; has high executive visibility; has high development, operating, or maintenance costs; is funded through other than direct appropriations; or is defined as major by the agency's capital planning and investment control process.

³Pub. L. No. 109-282, §§ 1 to 4, Sept. 26, 2006, as amended Pub. L. No. 110-252, § 6202(a), June 30, 2008 (31 U.S.C. § 6101 Note).

⁴GAO-11-262; GAO-10-701; GAO, *Electronic Government: Implementation of the Federal Funding Accountability and Transparency Act of 2006*, GAO-10-365, (Washington, D.C.: Mar. 12, 2010); *Information Technology: Agencies Need to Improve the Implementation and Use of Earned Value Techniques to Help Manage Major System Acquisitions*, GAO-10-2 (Washington, D.C.: Oct. 8, 2009); GAO-09-566; *Information Technology: Agencies Need to Establish Comprehensive Policies to Address Changes to Projects' Cost, Schedule, and Performance Goals*, GAO-08-925 (Washington, D.C.: July 31, 2008); *Information Technology: Agencies Need to Improve the Accuracy and Reliability of Investment Information*, GAO-06-250 (Washington, D.C.: Jan. 12, 2006); *Information Technology Management: Governmentwide Strategic Planning, Performance Measurement, and Investment Management Can Be Further Improved*, GAO-04-49 (Washington, D.C.: Jan. 12, 2004).

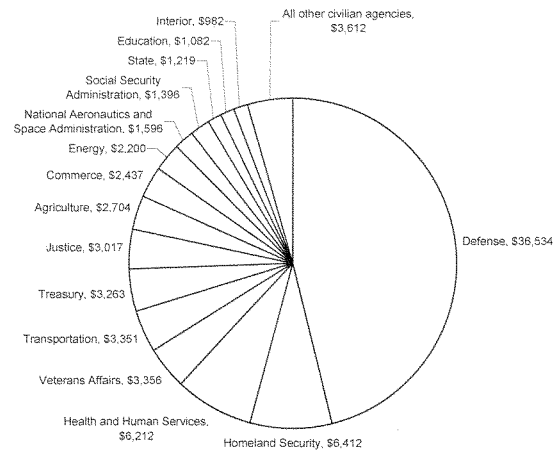
testimonies was performed in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

Background

OMB assists the President in overseeing the preparation of the federal budget and supervising budget administration in executive branch agencies. In helping to formulate the President's spending plans, OMB is responsible for evaluating the effectiveness of agency programs, policies, and procedures; assessing competing funding demands among agencies; and setting funding priorities. Further, the agency ensures that the federal budget is consistent with relevant statutes and presidential objectives.

Each year, OMB and federal agencies work together to determine how much the government plans to spend on IT projects and how these funds are to be allocated. The President's Budget for fiscal year 2011 included an estimated \$79 billion for IT investments. Figure 1 displays the breakdown of agencies' planned IT expenditures for fiscal year 2011.

Figure 1: Breakdown of \$79 Billion in Planned IT Investments for Fiscal Year 2011



Source: OMB data.

To improve IT investment oversight, Congress enacted the Clinger-Cohen Act of 1996, which requires OMB to establish processes to analyze, track, and evaluate the risks and results of major capital investments in information systems made by federal agencies and report to Congress on the net program performance benefits achieved as a result of these investments.⁵ Further, the act places responsibility for managing investments with the heads of agencies and establishes chief information officers (CIO) to advise and assist agency heads in carrying out this responsibility.

⁵40 U.S.C. § 11302(c).

Laws and Associated OMB Initiatives Seek to Improve Transparency and Oversight of IT and Other Investments

A long-standing goal of Congress has been to improve the performance and transparency of the federal government through the use of IT. This was, for example, a major goal of the E-Government Act of 2002.⁶ Under the act, the Administrator of OMB's Office of Electronic Government (also known as the federal Chief Information Officer) is responsible for assisting the Director of OMB in carrying out the act and other e-government initiatives. Projects supported by the act may include efforts to make federal government information and services more readily available to members of the public. For example, in June 2009, OMB deployed a public Web site—known as the IT Dashboard—to improve the transparency into and oversight of agencies' IT investments.

The Dashboard displays detailed information on federal agencies' major IT investments, including assessments of actual performance against cost and schedule targets (referred to as ratings) for approximately 800 major federal IT investments. According to OMB, these data are intended to provide a near real-time perspective of the performance on these investments, as well as a historical perspective. Further, the public display of these data is intended to allow OMB, other oversight bodies, including Congress, and the general public to hold government agencies accountable for results and progress.

In addition, to increase the transparency of and accountability for the over \$1 trillion in contracts and financial assistance awarded each year by federal agencies, Congress passed the Federal Funding Accountability and Transparency Act of 2006.⁷ Among other things, the act required OMB to establish a free, publicly accessible Web site containing data on federal awards (e.g., contracts, loans, and grants) no later than January 1, 2008. In addition, OMB was required to include data on subawards by

⁶Pub. L. No. 107-347 (Dec. 17, 2002).

⁷Pub. L. No. 109-282, §§ 1 to 4, Sept. 26, 2006, as amended Pub. L. No. 110-252, § 6202(a), June 30, 2008 (31 U.S.C. § 6101 Note).

January 1, 2009. The act also authorized OMB to issue guidance and instructions to federal agencies for reporting award information and requires agencies to comply with that guidance. OMB launched the Web site—www.USAspending.gov—in December 2007.

Prior Reviews of Agencies' IT Investment Governance Have Identified Weaknesses

We have previously reported on the enduring challenges that agencies have faced in effectively managing IT investments, which demonstrate the continuing need for more effective oversight and transparency. Specifically, we found that agencies had weaknesses in several areas relating to the oversight, budget justification, and planning and management of these investments, among others.

- In January 2004, we reported that agencies did not always have the mechanisms in place for investment review boards to effectively control their investments.⁸ Among other things, we reported that selected agencies largely had IT investment management boards, but these boards did not have key policies and procedures in place for ensuring that projects were meeting expectations. Agencies cited a variety of reasons for not having these mechanisms in place, such as that the CIO position had been vacant, a requirement was not included in guidance, or that the process was being revised. We made recommendations to the agencies regarding those practices that were not fully in place.
- In January 2006, we reported that the underlying support for agencies' budget justifications for IT investments (OMB's Capital Asset Plan and Business Case, also known as the exhibit 300) was often inadequate.⁹ Specifically, we found weaknesses in all 29 of the exhibit 300s that we reviewed. For example, 21 investments were required to use a specific management system as the basis for the cost, schedule, and performance information in the exhibit 300, but only 6 did so following OMB-required standards. We made recommendations aimed at improving related guidance and training

⁸GAO-04-49.

⁹GAO-06-250.

and at ensuring the disclosure and mitigation of limitations on reliability.

- In July 2008, we reported that approximately half of the federal government's major IT projects had been rebaselined—i.e., had modifications made to their cost, schedule, and performance goals to reflect changed circumstances.¹⁰ Reasons for these rebaselines included changes in project goals, changes in funding, or inaccurate original baselines. We also found that agencies lacked comprehensive rebaselining policies and that, without such policies, baseline changes could be used to mask cost overruns or schedule delays. We recommended that OMB issue guidance for rebaselining policies and that the major agencies develop policies that address identified weaknesses. Consequently, OMB issued a memorandum in June 2010 on baseline management that provided this guidance.¹¹
- In June 2009, we reported that about half of the projects we examined did not receive selection reviews (to confirm that they support mission needs) or oversight reviews (to ensure that they are meeting expected cost and schedule targets).¹² Specifically, 12 of the 24 reviewed projects that were identified by OMB as being poorly planned did not receive a selection review, and 13 of 28 poorly performing projects we reviewed did not receive an oversight review by a department-level board. To address these weaknesses, we made recommendations to selected agencies to improve their department-level board representation and selection and oversight processes.
- In October 2009, we reported that selected agencies' policies were not fully consistent with best practices for a key program management tool.¹³ Specifically, most agencies' policies lacked appropriate earned value management training requirements and

¹⁰GAO-08-925.

¹¹OMB Memorandum, M-10-27.

¹²GAO-09-566.

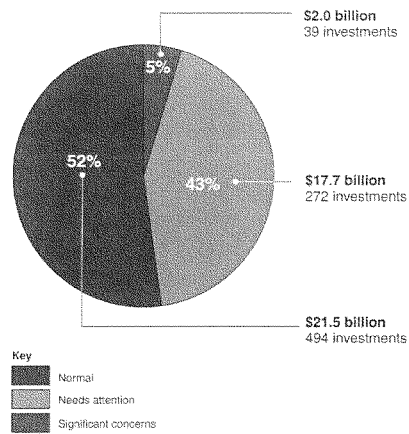
¹³GAO-10-2.

did not adequately define criteria for revising baselines. Earned value management is a project management approach that, if implemented appropriately, provides objective reports of project status, produces early warning signs of impending schedule delays and cost overruns, and provides unbiased estimates of anticipated costs at completion. Additionally, we reported that for 13 of 16 selected investments, key practices necessary for sound earned value management execution had not been implemented. Finally, we estimated the total cost overrun of these investments to be about \$3 billion at program completion. We recommended that the selected agencies modify policies to be consistent with best practices, implement practices that address identified weaknesses, and manage negative earned value trends.

Continued Attention Is Needed to Accurately Report Federal Spending and Improve Investment Management

OMB's IT Dashboard, deployed in June 2009, provides detailed information, including performance ratings, for over 800 major investments at federal agencies. Each investment's performance data are updated monthly, which is a major improvement from the quarterly reporting cycle used by OMB's prior oversight mechanisms. As of March 2011, the Dashboard provided visibility into over 300 IT investments in need of management attention (rated "yellow" to indicate the need for attention or "red" to indicate significant concerns)—totaling almost \$20 billion. (See fig. 2.)

Figure 2: Overall Performance Ratings of Major IT Investments on the Dashboard, as of March 2011



The Federal CIO stated that the Dashboard has greatly improved oversight capabilities compared to previously used mechanisms, increased the accountability of agencies' CIOs, and established much-needed transparency.

However, in a series of reviews, we have found that the data on the Dashboard are not always accurate. Specifically, in reviews of selected investments from 10 agencies, we found that the Dashboard ratings were not always consistent with agency performance data.

-
- In July 2010, we reported that cost and schedule performance ratings were not always accurate for selected investments.¹⁴ Specifically, we reviewed investments at the Departments of Agriculture, Defense, Energy, Health and Human Services, and Justice and found that the cost and schedule ratings on the Dashboard were not accurate for 4 of 8 selected investments and the ratings did not take into consideration current performance. For example, the Dashboard rated a Justice investment's cost performance as "green" from July 2009 through January 2010, but our analysis showed the investment's cost performance was equivalent to a "yellow" rating, meaning it needed attention. We also found that there were large inconsistencies in the number of investment activities that agencies report on the Dashboard.
 - In March 2011, we also reported that agencies and OMB need to do more to ensure the Dashboard's data accuracy.¹⁵ Specifically, we reviewed investments at the Departments of Homeland Security, Transportation, Treasury, and Veterans Affairs, and the Social Security Administration and found that cost ratings were inaccurate for 6 of 10 selected investments and schedule ratings were inaccurate for 9 of 10. We also found weaknesses in agency and OMB practices contributing to the inaccuracies on the Dashboard. In particular, we found that agencies had uploaded inconsistent or erroneous data, failed to submit data, and/or used unreliable source information. Additionally, we found that OMB's ratings understated some schedule variances and did not emphasize current performance.

In these reviews, we made recommendations to the agencies and OMB aimed at improving data accuracy on the Dashboard. Specifically, we recommended that the selected agencies comply with OMB's guidance to standardize activity reporting, provide complete and accurate data to the Dashboard on a monthly basis, and ensure that CIO's ratings of investments disclose issues that could undermine the accuracy of investment data. These agencies

¹⁴GAO-10-701.

¹⁵GAO-11-262.

generally concurred with our recommendations. We also recommended that OMB improve how it rates investments related to current performance and schedule variance. Further, we recommended that OMB report on the effect of planned changes to the Dashboard and provide guidance to agencies to standardize reporting. OMB agreed with most of these recommendations but disagreed with the recommendation to change how it reflects current investment performance in its ratings because Dashboard data are updated on a monthly basis. However, we maintained that current investment performance may not always be as apparent as it should be; while data are updated monthly, ratings include historical data, which can mask more recent performance.

Drawing on the visibility into federal IT investments provided by the Dashboard, OMB has initiated efforts to improve the management of IT investments needing attention. In particular, in January 2010, the Federal CIO began leading TechStat sessions—a review of selected IT investments between OMB and agency leadership to increase accountability and transparency and improve performance. OMB has identified factors that may result in a TechStat session, such as policy interests, Dashboard data inconsistencies, recurring patterns of problems, or an OMB analyst's concerns with an investment.

As of December 2010, OMB officials stated that 58 TechStat sessions have been held with federal agencies. According to OMB, these sessions have enabled the government to improve or terminate IT investments that are experiencing performance problems. For example, the June 2010 TechStat on the National Archives and Records Administration's Electronic Records Archives investment resulted in six corrective actions, including halting fiscal year 2012 development funding pending the completion of a strategic plan. In January 2011, we reported that the National Archives and Records Administration had not been positioned to identify potential cost and schedule problems early, and had not been able to take timely actions to correct problems, delays, and

cost increases on this system acquisition program.¹⁶ Moreover, we estimated that the program would likely overrun costs by between \$205 and \$405 million if the agency completed the program as originally designed. We made multiple recommendations to the Archivist of the United States, including establishing a comprehensive plan for all remaining work, improving the accuracy of key performance reports, and engaging executive leadership in correcting negative performance trends. The Archivist generally concurred with our recommendations.

OMB has also identified 26 additional high-priority IT projects and plans to coordinate with agencies to develop corrective actions for these projects at future TechStat sessions. According to OMB officials, OMB and agency CIOs identified these projects using Dashboard data, TechStat sessions, and other forms of research. As an example of these corrective actions, OMB directed the Department of the Interior to establish incremental deliverables for its Incident Management Analysis and Reporting System, which will accelerate delivery of services that will help 6,000 law enforcement officers protect the nation's natural resources and cultural monuments.

According to OMB, the TechStat sessions and other OMB management reviews had resulted in a \$3 billion reduction in life-cycle costs as of December 2010. Further, OMB officials stated that, as a result of these sessions, 11 investments have been reduced in scope and 4 have been canceled. Additional opportunities for potential cost savings and efficiencies exist through the use of the Dashboard by executive branch agencies to identify and make decisions about poorly performing investments, as well as its continued use by congressional committees to support critical oversight efforts.

In addition, our recent and ongoing work has identified other opportunities for using the Dashboard to increase operational

¹⁶GAO, *Electronic Records Archive: National Archive Needs to Strengthen Its Capacity to Use Earned Value Techniques to Management and Oversee Development*, GAO-11-86 (Washington, D.C.: Jan. 13, 2011).

efficiency and realize cost savings. As part of our first report responding to a statutory requirement that GAO identify duplicative goals or activities in the federal government, we reported on the potential for further significant savings if OMB implements planned improvements to the Dashboard, along with outstanding GAO recommendations.¹⁷ We also have ongoing work to evaluate the publicly available data on the Dashboard in order to determine the extent to which agencies may be investing in similar projects, as well as efforts to identify and act on such duplicative investments. As part of that ongoing work, we found that federal agencies invest in hundreds of systems with similar functions, including 602 human resources management systems, 741 supply chain management systems, 436 health systems, and 94 public affairs systems.¹⁸ Many of these systems are within a single department. For example, 614 of the 741 supply chain management systems are within the Department of Defense, and 331 of the 436 health systems are within the Department of Health and Human Services. While OMB and selected agencies have undertaken initiatives to reduce duplicative investments, there are opportunities to do more to identify and address such systems. We plan to issue a report on this body of work in September 2011.

While the Dashboard focuses on IT investments, OMB's other reporting mechanism, USAspending.gov, is to provide detailed information on federal awards, such as contracts, loans, and grants. This site was deployed in December 2007 in response to statutory requirements¹⁹ intended to increase the transparency of and accountability for the over \$1 trillion in contracts and financial assistance awarded each year by federal agencies.

In March 2010, we reported that, of nine statutory requirements, OMB had satisfied six, partially satisfied one, and had not yet

¹⁷GAO, *Opportunities to Reduce Potential Duplication in Government Programs, Save Tax Dollars, and Enhance Revenue*, GAO-11-318SP (Washington, D.C.: Mar. 1, 2011).

¹⁸These figures are for fiscal year 2011.

¹⁹The Federal Funding Accountability and Transparency Act of 2006, Pub. L. No. 109-282, §§ 1 to 4, Sept. 26, 2006, as amended Pub. L. No. 110-252, § 6202(a), June 30, 2008 (31 U.S.C. § 6101 Note).

satisfied the remaining two.²⁰ For example, USAspending.gov allowed searches of data by all required data elements and provided for totals and downloadable data. However, OMB had not yet included subaward data on the Web site nor had it yet submitted a required annual report to Congress detailing the use of the site and the reporting burden placed on award recipients. Further, while USAspending.gov contained required fiscal year 2008 data on grants from 29 agencies, 9 agencies did not report a total of 15 awards as required. Moreover, OMB had not implemented a process for identifying nonreporting agencies but instead relied on voluntary agency compliance with its guidance to ensure complete reporting.

In addition, we reported that, in a random sample of 100 awards, numerous inconsistencies existed between USAspending.gov data and records provided by awarding agencies. Each of the 100 awards had at least one required data field that was blank or inconsistent with agency records—or for which agency records lacked sufficient information to evaluate their consistency with data on USAspending.gov. The most common data fields with inconsistencies or omissions included titles describing the purpose of the award and the city where award-funded work was to be performed. These errors could be attributed, in part, to a lack of specific OMB guidance on how agencies should fill in these fields and how they should perform the required validation of their data submissions. In addition, publicly available information that OMB provides on the completeness of agency-provided data did not address a required data field relating to the city where work for the award was to be performed. Accordingly, we recommended that OMB include all required data on the site, ensure complete reporting, and clarify guidance for verifying agency-reported data. OMB generally agreed with our findings and recommendations.

Subsequent to the completion of our USAspending.gov audit work, OMB issued guidance intended to improve the quality of publicly disseminated federal spending data. Specifically, in February 2010,

²⁰GAO-10-365.

OMB issued a framework which called for agencies to establish internal controls over the preparation and dissemination of financial data, including data reported to USAspending.gov. Further, agencies are expected to submit to OMB a data quality plan that describes the current processes implemented at their respective agencies. Also, in April 2010, OMB issued guidance which required agencies to report this data to USAspending.gov. This guidance also called for agencies to establish metrics for measuring the quality and completeness of data reported to USAspending.gov and set goals for improvements in data quality.

In summary, OMB's recent efforts have resulted in greater transparency into and oversight of federal spending, but continued attention is necessary to build on the progress that has been made. For example, OMB and federal agencies need to improve the accuracy of information on the Dashboard and USAspending.gov and continue to use OMB's TechStat sessions to address troubled IT investments. In addition, the expanded use of the Dashboard to identify duplicative goals or activities in the federal government, along with the implementation of outstanding GAO recommendations, should result in more effective IT management and delivery of mission-critical systems, as well as further reduction in wasteful spending on poorly managed or unnecessary investments.

Chairman Lankford, Ranking Member Connolly, and Members of the Subcommittee, this concludes my statement. I would be pleased to answer any questions at this time.

GAO Contact and Staff Acknowledgments

If you should have any questions about this testimony, please contact me at (202) 512-6253 or by e-mail at willemsenj@gao.gov. Individuals who made key contributions to this testimony are Carol Cha, Assistant Director; Kate Agatone; Eric Costello; Lee McCracken; Colleen Phillips; James Sweetman; and Kevin Walsh.

Mr. LANKFORD. Thank you.

And with that, I recognize myself for 5 minutes to begin.

Let me talk through several issues here.

Mr. Kundra, let me start off and I am going to run through your list of 10 is a great list and it is a good thing to be able to pass on to the person that's after you. Let me just mention a couple of things on it.

Six and seven on that validating data upfront and releasing data in real time seem to be conflicting at times. When you have to validate data, obviously that slows the process down and you've got to get it out in real time, and so that seems a challenge.

You and I spoke before about my priorities on data from the Federal Government and that is that the American people get a chance to see it as fast as possible and as accurate as possible. That puts six and seven right there together on your list. Whether that be USASpending, whether that be Grants.gov, whatever it may be, Data.gov, they get a chance to see the information, see it as complete as they can, can research it, cross it, everything else they need to be able to do.

The second aspect of our data, to me, that is very important is for the decisionmakers, whether they be in the agency or legislators, whoever it may be, that's going to make a decision, it has to be accurate and complete. How do we accomplish six and seven? Do you have ideas you can pass on and say where does the priority land between validating data upfront and releasing data in real time?

Mr. KUNDRA. Absolutely, when I talk about validating data upfront, what I mean by that is the example I used as far as congressional districts were concerned, which is that there is no need for people to go in and enter that information if they can just do a drop down. It is how you would actually architect and engineer systems.

But, the preferred path would be that people don't actually have to enter data if that data is available in another source. This is a challenge that I faced when I used to work in the Commonwealth of Virginia for the Governor and we were building a small Women and Minority Dashboard. Part of it was that everybody was asking agencies for the data, and I asked a very simple question, can't we just go to the credit card companies and actually get the data directly from them. We know that data is being generated and credit card data is actually stored there, why do we have to actually ask people to self report.

That not only reduced the burden but it actually also allowed us to get real data. It wasn't people saying this is what I did, but it's data that we were getting directly from the very data bases that stored it. So, with six where we are talking about the validation upfront, what that allows you to do is make sure that people don't even have an option. In life, a lot of it is about defaults, so if the defaults are very complicated, you are actually going to end up with a degree of error that's going to be very high.

Second, in terms of real time, we should actually try to get machine-to-machine interactions where possible. So, in a credit card case, imagine if we had to ask everybody for every credit card transaction to go and to enter it on some centralized system. It

would be burdensome, you would spend more money actually entering that data than you would generating value out of that data.

Mr. LANKFORD. We had the same issue and the agencies were terrific to be able to respond to our requests for additional information on processes and systems and what's in place and I do want to thank all the agencies because I'm sure that was very time consuming.

One of the things that came out was that there was a lot of manual input still of data. How do we get through that because that's where we get a lot of inaccuracies, that's where it takes a month to be able to get information. In this current time, especially with the budget issues, we're dealing with accurate, immediate data is very important that we can get and then generally reducing the number of mistakes. How do we start working through that process so there is fewer manual input and more automatic like what you're mentioning?

Mr. KUNDRA. So, I think part of what the President has done with the Executive order that sets up the Government Accountability and Transparency Board is actually going to be to do a total reset in terms of how the government is operating when it comes to transparency. What I mean by that is there is a simple question before us which is that if the Treasury Department is actually writing most of the checks and literally before a check is issued, the Treasury Department can have an Internet payment portal that allows you to get that data right from where the checks are being issued. On the manual side, that is a more complicated issue and what I mean by that is if you look at contracts, for example, there are certain agencies when you look at the pre-award phase, where they are writing the RFP and then they put the RFP on the street, then they make an award and then they've got to manage that contract. Agencies at a different or a very different evolutionary cycle when it comes to some of their processes are end-to-end paper, or some of them actually go from paper they go to digital and others are all end-to-end electronic.

So, the way we have to attack this problem is two pronged. One is go to the golden source which would be creating some type of Internet payment portal so the default is just digital. We know somebody is writing the check, why aren't we just going to them? Why are we asking the recipient to fill in all this paperwork when the government is the one that's issuing the check? Second would be to modernize on the back end some of these outdated systems that are paper-based.

Mr. LANKFORD. Thank you.

And with that, I am going to pass on 5 minutes to Mr. Connolly.

Mr. CONNOLLY. Thank you, Mr. Chairman.

And of course votes have now been called.

Mr. LANKFORD. I'm going to make a quick comment and not take up your time. We will go through the votes being called. It should take about 20 minutes for this first series of votes. I want to make sure we get through all three of us that are here to be able to do that and then we'll probably buzz back off and we'll try to evaluate from there.

Mr. CONNOLLY. It was my understanding Mr. Chairman that there will only be one series of votes.

Mr. LANKFORD. Right, but the first one is a 15 minute vote, so we will make sure all three of us get our questions in.

Mr. CONNOLLY. Well, I won't be back, so perhaps you will indulge me.

Mr. LANKFORD. Is that a promise?

Mr. CONNOLLY. I am going to leave you guessing, at any rate, but thank you.

And, I am going to urge you to please to make concise answers because there is an issue of time.

One of the things Mr. Willemssen, you focused on and so have you about transparency and accountability and how the IT Dashboard has really helped. And I assume, from your point of view, all of your point of view, it's unprecedented in terms of transparency and accountability in the Federal Government, would you agree?

[Chorus of agreement.]

Mr. CONNOLLY. I make that point because we sometimes on this committee, not the subcommittee, but on the committee, the full committee, we hear statements about how the lack of transparency by the Obama administration but as a matter of fact, frankly, this tool is unprecedented and there is lots of transparency and accountability.

Now, I headed up a very large government for 5 years and one of the concerns I always had about IT investments was absolutely transparency and accountability are very important from a public policy point of view and how we serve the public, but we have to have metrics to go beyond that. What about productivity improvement?

And so my question to especially Mr. Kundra and Mr. Willemssen is how have we used these tools to improve the efficiency of delivery of services? Are we in fact achieving productivity gains in the public sector with these massive investments in IT and shouldn't we, if we don't?

Mr. WILLEMSSEN. I would say from an efficiency perspective, one of the great benefits of the Dashboard is the fact that it can identify governmentwide investments in similar functions so that you can potentially look for duplication that could potentially be eliminated and save money.

Mr. CONNOLLY. But are we doing it?

Mr. WILLEMSSEN. The administration is in the process of doing that. It is a bit of a carryover from the prior administration's line of business effort to try to look at investments across agencies and instead of agencies rebuilding and reinventing the wheel, trying to reuse consistent with one of Vivek's 10 points, trying to reuse what's already out there rather than rebuild and reinvest and a lot more money being spent to do something that is already working well.

I will let Vivek speak for himself. I think they are in the process of doing that. We would like to see a little bit more.

Mr. CONNOLLY. Vivek. I mean Mr. Kundra.

Mr. KUNDRA. We see major results. For example, through these tools, we have been able to identify the fact that we went from 432 data centers to 2,000-plus data centers in a decade, and we're cracking down on those data centers, shutting down 800. We have

already shut down 67 data centers and are on track to shut down 137.

But in terms of productivity, we have also seen as a result of this, we were able to see where we had inefficient technology such as collaboration. So GSA, for example, migrated 17,000 employees to a system and so did USDA, saving not only \$42 million but using modern technologies to accelerate business processes. And the VA has some really good examples when it comes to veterans benefits and cutting down the time it takes, actually numbers of days, and I'll let Roger speak to that, through these investments as far as when we are issuing those benefits.

Mr. CONNOLLY. Before Roger does, you mentioned the data centers and how they exploded sort of without rhyme or reason, and you have called for a 40 percent reduction by 2015. I have introduced a bill, the Federal Cost Reduction Act, to make that statutory, just in case other people go away, and would double that goal over the next 5 year period. Is that a piece of legislation you think would be helpful in this regard?

Mr. KUNDRA. The data center provisions, absolutely, especially if we look at the ultimate vision, from my perspective, is that we would end up as a nation basically building three digital Ft. Knox's, three major data centers as we think about it. There is no reason to have over 2,000 data centers across the Federal Government.

Mr. CONNOLLY. Mr. Chairman, I am going to ask if you would be willing to indulge me by giving me one extra minute because I am not coming back.

Mr. LANKFORD. Without objection.

Mr. CONNOLLY. I thank my colleagues.

Thank you and Mr. Chairman, I hope you will join us in that legislative effort because I think it is a good bipartisan piece of legislation that could actually save us some money and codify what Mr. Kundra has so ably begun.

Mr. Baker, I didn't want to cut you off, you wanted to talk about the Veterans Administration experience?

Mr. BAKER. I would just point out one thing with the system we built for the new GI bill, if you recall that's putting now hundreds of thousands of veterans into college, billions of dollars. The new system that we introduced and that changed the processing time for the main claim when veterans go into college from 42 minutes to 7 minutes. That reduction was hundreds of head count in processing those claims, and clearly you can equate the reduction in the head count needed to the number of people, I'm sorry the dollars needed to process those claims.

Mr. CONNOLLY. Thank you. I think I have with your indulgence, Mr. Chairman, Mr. Kundra, you talked about a new app economy. What did you refer, what did you mean by that reference?

Mr. KUNDRA. What I mean by the new app economy is that the 390,000 plus datasets that are out there in the public domain now will allow us to tap into the ingenuity of the American people in ways that we haven't before. We actually worked with Congress on the America Competes Act which allows every agency now to issue challenges up to \$50 million. So the old path of acquiring tech-

nology was only going through a grants process or through a long, drawn out procurement process.

Now an agency can go out there and say for 5 million or 10 million, here is a problem that we are trying to solve and we're looking for applications rather than RFPs. Already we have seen, for example, is that developers have taken data that comes out of the Consumer Financial Protection Agency and created apps that allow you to track what is going on within your specific location.

And we have also seen in terms of apps apps that have been built that allow you to see based on your iPhone, you can scan a product and see whether it has been recalled or not to apps that allow you see on a real time basis what the closest train station is sent to you and when trains are coming in both directions to stimulus funding and where it is being spent.

So huge, huge improvements in terms of innovative apps that are being created. Hundreds of these have already been built.

Mr. CONNOLLY. Thank you and thank you, Mr. Chairman, for your courtesy, and you, Mr. Farenthold, I appreciate it.

Mr. LANKFORD. Thank you.

Mr. Farenthold, you are recognized for 5 minutes.

Mr. FARENTHOLD. Thank you very much. I;m going to be quick. We actually have nine votes it looks like here, so it may be a while before we are able to get back.

Mr. Kundra, my question to you is, as we are starting to gather all of this data and strive toward real time, what sort of effort is being taken into data analysis to detect waste, fraud and abuse and to find for instance on a list of payees, the outliers?

Mr. KUNDRA. So, one of the lessons learned through the Recovery Act implementation was to actually use these forensic technologies and business intelligence platforms. So there was an entity called Pelletier that mined a lot of data and allowed us to see how we could slice and dice and cube through terabytes and petabytes of data. We are looking at the same technologies and applying them now to health care and other domains across the Federal Government, and the Recovery Operations Center is actually the model that is being scaled.

Mr. FARENTHOLD. Thank you very much and Mr. Baker, we do a lot of case work with the Veterans Administration in the district office and a constant complaint is the length of time some of this stuff takes to process. I notice you had one example of how you are getting some processes down to the minutes. That isn't true throughout the agency. I'm hearing reports of years from someone coming out of DOD before they actually get into your data base where you all aren't getting the data or they are not being able to get their exams quick enough. What is being done to address those problems?

Mr. BAKER. Thank you Congressman, we have, and are working a major investment in the IT side to turn that entire paper-bound process for benefits administration at the VA into a paperless process that will then begin to allow us to really work on the business processes there. We want to do the same thing with compensation and pension benefits which is exactly what you are talking to, that we did with education benefits which is fully automate them, and

take those processes and get a sixfold improvement on the processing time for those.

Mr. FARENTHOLD. Do you have a timeframe on getting something like that implemented?

Mr. BAKER. Yes, we will implement in 2012. We have been on the path of that implementation for about 18 months at this point. Full implementation of it will occur during 2012.

Mr. FARENTHOLD. Alright that's basically all I've got. I will yield back the remainder of my time.

Mr. LANKFORD. Thank you. Mr. Barwell, let me ask you a quick question. Not to mention the great names for your system, the STARS and the STRIPES system, but integrating that with Treasury and with OMB, is that a reproducible system that can be done in other agencies? How long did it take to process that and how is that working?

Mr. BARWELL. The FACTS I and FACTS II systems have been in operation for some time now, I am not sure of the exact date when this came in, but the procedures for uploading financial information into FACTS I and FACTS II are well established and the process is pretty mature. I think it is applied consistently across the government too.

Mr. LANKFORD. Mr. Kundra, are all other agencies experiencing that same type of system where it's immediately put into their system and then it's populated out as well and it's that integrated and seamless or are there other agencies that are not experiencing that same kind of success?

Mr. KUNDRA. Now I wish that was the case across the entire Federal Government but given that different agencies have either successfully implemented whether it's financial systems or contracting systems versus others who frankly, we've have had to terminate those systems because after years and years of attempting, we continue to throw in millions of dollars and nothing was really happening.

Part of what we are looking at is making sure that across the entire Federal Government, that we demand that within a 6-month period, there be meaningful functionality if an IT project is started. The Department of Defense, for example, spent 12 years and \$1 billion on an integrated human resource system that had to be terminated because it didn't operate and we kept throwing good money after bad money.

Some of these departments don't have the capacity frankly to execute or deliver, so the leapfrog for us is actually going to be literally moving to Cloud solutions. So the challenge before the private sector is to actually help us stand up Cloud-based systems so that on day one, we can start using them rather than having to wait 12 years before we can use them.

Mr. LANKFORD. Obviously that is unacceptable in a technology environment to wait 12 years to be able to integrate that. That is a lot of different versions and languages and everything else you are going to work through in that process.

Data.gov and USASpending.gov are some great ideas. They have good information that's being loaded onto them. Obviously, we need much faster information, we need to make sure that information is accurate. Let me just ask a quick question about Data.gov. What

is your goal for the actual data that's on there? Because the variety of data in the different agencies is plentiful. Some of them have quality data, some of them have very old data, some of them have data that no one's going to look for but there is other data they would love to see.

The basics for me is I think everyone should be able to go to not only an agency Web site but also a central location and see how many different departments, how many people work in that department, what is the budget of that department, what are they accomplishing, what are the documents that can come out of that to be able to show just the basics. If they see a name that's a bureau, they should be able to search for that, find it, get the data, find out more about it, rather than it is hidden out there somewhere and you can't even discover what it is. Your goal for Data.gov?

Mr. KUNDRA. Sure, so let me lift up in terms of a single entry for all Americans is actually USA.gov. That platform should become the single platform across the entire U.S. Government. Today, what we realized is a lot of thugs who come onto USA.gov they are actually looking for driver's licenses or passports. And so these are State services or they are Federal services, and the idea is that for an average American person they shouldn't have to navigate the Federal bureaucracy to figure out what service they want. They should be able to just go on USA.gov, search, which is what they can do today and find that information.

The goal for Data.gov, the dream there is that we want to create this platform which we have, with 390,000 data sets, but it should be millions of data sets.

Mr. LANKFORD. Right, because much of that data is very old that is on there.

Mr. KUNDRA. Some of it is real like the FAA data. In other cases, it is old data from Medicare/Medicaid, but we believe there is a billion dollar opportunity for entrepreneurs to create applications and build a data curation layer. I will give you one example.

There is a site called Hospitalcompare.gov. Most people don't even know what that site is and never really visited it. As soon as we took that data and democratized it, Bing decided to take that data and said, it is interesting, this is a very rich data set. It actually has the name of hospitals, how patients rate it, the outcome based on the surgeries or operations.

So now what happens if you go to Bing.com and do a search for Georgetown Hospital or George Washington Hospital, right on that search box it will show you what do patients think of Georgetown Hospital, what do they think in terms of outcomes and ratings. That is the vision, which is to democratize that data, allow the private sector to build innovative applications and generate new jobs.

Mr. LANKFORD. Which, by the way, we would completely concur with that. That is the twofold that I was talking about before, the American people being able to see it, research it, pull it down and democratize the data and then decisionmakers be able to get very accurate, fast information and know it is reliable.

I do appreciate your time. I'm going to do this considering the votes are going to take a little over an hour so it looks like I'm going to go ahead and dismiss this hearing and let you all be able to get back to your lives. Your written testimony will go in the per-

manent record. Obviously, there were multiple Members that couldn't make it based on a hearing that just came and just finished up but I don't want to be able to keep you all waiting that long period of time.

If we have additional questions, do you mind if we write you a quick question and be able to follow up on that? Let the record show everyone answered in the affirmative. I do appreciate that and we will try to follow up quickly if we have additional questions.

With that, this meeting is adjourned.

[Whereupon, at 2:33 p.m., the subcommittee was adjourned.]

